# **COGR**an organization of research universities

**COUNCIL ON GOVERNMENTAL RELATIONS** 

One Dupont Circle, N.W., Suite 670 Washington, D.C. 20036 (202) 861-2595

November 3, 1987

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ASSISTANT EXECUTIVE DIRECTOR KATHARINA PHILLIPS Mr. Jon Glaudemans, Budget Examiner Health and Social Service Branch Human Resources, Veterans and Labor Office of Management and Budget New Executive Office Building, Room 7002 Washington, D.C. 20503

Dear Jon:

I am enclosing for your review a paper entitled "Incentives to Control Indirect Costs at Research Universities." This paper, written by Marna Whittington and Anthony Merritt of the University of Pennsylvania, is the fifth paper prepared by the Council on Governmental Relations in response to questions raised by the Office of Management and Budget. After you have had an opportunity to review the paper, I would like to set up a meeting to discuss the content.

Two additional efforts having to do with cost sharing and the 3.6% cap on faculty effort are under consideration by the COGR Board of Management. The cost sharing paper should be finalized and submitted by the end of the year. The paper on the 3.6% cap is more problematical. Given the fact that the 3.6% cap has been in place only since July 1, 1987 the impact has not been fully experienced by our member institutions. Further, Circular A-21 elimination of faculty effort reporting for indirect cost calculations may make it impossible to measure the impact. This is even more problematical given that many institutions negotiated multi-year fixed Departmental indirect cost rates prior to the 3.6% cap as well as multi-year predetermined rates since the cap was imposed. It is our intention to continue to study this issue, but it may not be possible to respond specifically to your questions concerning the impact.

I look forward to meeting you and discussing the paper on incentives to control indirect costs.

With best wishes,

V. Wayne Kennedy

Enclosure

cc: Anthony Merritt Frederick R. Ford

bcc: Board

UNIVERSITY of PENNSYLVANIA
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Office of Research Administration

Suite 300 133 South 36th Street Philadelphia, PA 19104-3246 215-898-7293

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October 13, 1987

Ms. Katharina Phillips Assistant Executive Director Council on governmental Relations One Dupont Circle, N.W. Suite 670 Washington, DC 20036

RE: Incentives to Control Indirect Costs at Research Universities

Dear Kate:

Enclosed please find the final version of Marna's and my paper on incentives to control indirect costs. I am available to discuss the paper with OMB at their convenience.

If anything further is needed concerning the paper, please let me know.

Sincerely,

Anthony Merritt

cc: M. Whittington w/encl.

## INCENTIVES TO CONTROL INDIRECT COSTS at RESEARCH UNIVERSITIES

by Dr. Marna Whittington Mr. Anthony Merritt

#### Introduction

This paper will describe indirect costs as one element of a complex financial matrix in which all elements are under continuous scrutiny to insure cost control. Research universities have three primary missions: 1)instruction, 2) research, and 3) public service. These missions are carried out by a single faculty and staff, supported by a unified infrastructure, of facilities, equipment, and support services. While the revenue streams supporting each of these missions are generally discrete, the expenses associated with each of them are frequently comingled. The fact that these missions are so closely intertwined is at once the key to the strength of the research university and the source of confusion regarding the appropriate allocation of costs to each mission. However, a careful examination of how colleges and universities allocate and manage their resources, coupled with a review of current and future pressures on those resources, will reveal the absolute necessity of controlling total operating costs, indirect as well as direct.

### University Costs, Direct and Indirect

Before discussing incentives to control costs it will be useful to understand the nature of the costs involved as well as the methods for their determination and distribution. It is also important to appreciate the management and political environment in which resource allocation decisions are made.

The costs of a university are often categorized by the functions cited above, instruction, research, and service. Another way to look at costs is the ease with which they can be identified with a particular function or purpose. Costs that can be readily related such as the salary of an individual teaching a specific course, or the cost of supplies used for a particular research project are defined as direct costs while costs not easily attributable to a specific function such as utilities, building maintenance or administration are classified as indirect costs. Both direct and indirect costs are real and necessary for the proper functioning of the institution, however, the methods of how to appropriately assign these costs to the benefiting function in an equitable fashion differ and are the cause of continuing disagreement. As long as a college or university continues to carry out its mission, it incurs costs for supporting its operations which must ultimately be paid by the institution, whether from its own or external funds. Failure to manage these costs efficiently effects all programs of the institution and may cause its ultimate demise.

It is also important to recognize that as multiple-objective organizations, colleges and universities have multiple sources of revenue. Unlike single-objective institutions, such as hospitals, colleges and universities are unable to automatically pass through their total operating costs to third parties. The resulting budgetary pressures provide significant incentive to minimize indirect costs.

Universities are by nature collegial organizations in which management and decision making are shared between trustees, administrators, faculty, alumni and even students. While the degree of such sharing may vary, the concept is universal. Thus, resource allocation and financial management decisions while primarily the responsibility of trustees and administrators, are subject to significant review and comment from faculty, through committees as well as individuals. As the primary generators and users of federal research funds, the faculty serve as important critics of institutional behavior in cost allocation. Their continuing oversight of resource allocation priorities and programmatic decision making is a significant factor in controlling costs.

### University Revenues

An analysis of the sources of revenue for colleges and universities indicates that all are projected to grow more slowly in coming years and that some are in jeopardy. In addition, universities are facing an increase in the cost of capital, as well as diminishing of the sources of supply. The Tax Reform Act limited the access of private universities to the tax exempt market to \$150 million and increased the costs of borrowing in both the taxable and tax-exempt markets. There is concomitantly an increasing reluctance of foundations and donors to give "bricks and mortar" dollars, and the Federal government has failed to make a commitment to fund facilities. The research mission of a university is capital intensive and now only a small portion of the capital required for research facilities and equipment is provided by Federal grants and contracts. The General Accounting Office \* reports the following for a sample of 28 research universities, drawn from the 100 universities that receive the most federal research funds in fiscal year 1983:

- Between 1980 and 1984, the annual university investment for construction in science and engineering was 9 to 12 times higher than the annual federal indirect cost reimbursement for building depreciation.
- Annual university expenditures for research equipment from non-federal sources was about twice as must as the annual federal reimbursement for equipment depreciation.
- Experts on university finances, whom we interviewed, expressed some concern that universities may be increasing their physical plant debt due, in part, to borrowing for research facilities.

Operating funds for major research universities are principally derived from six sources: 1) tuition and fees, 2) government grants and contracts, 3) gifts, 4) investment income, 5) appropriations, 6) service income - usually health services income.

Each of these sources of operating support is currently under varying degrees of pressure. Research universities have become increasingly dependent on tuition and fees as a source of revenue to support the institution. The GAO report cited previously noted:

- The fastest growing source of universities education and general revenues was tuition and fees. Revenues from tuition and fees were 48% greater in 1984 than in 1975 for the overall sample.
- In 1975, tuition and fees were 21% of the educational and general revenues and in 1985, they accounted for 25% of educational and general revenues.

The rapid escalation of relative tuition contribution to revenues, together with the absolute cost of tuition and fees, the decrease in availability of financial aid and the low Consumer Price Index (C.P.I.) make it unrealistic to expect that universities will be able to continue with what has become the historic trend in tuition increases.

Government research support has also experienced a healthy annual growth rate over the previous decade. However, the Federal budget deficit pressures, efforts to modify college and university cost principles, and recent attempts by N.I.H. to defer spending all lead the prudent University financial officer to conservatively estimate future revenue from federal research funds.

Though the stock market has performed well over the last several years, recent studies indicate that the nominal value of spending from the average endowment has increased by about 90% since 1970, while the inflation adjusted value has declined by 34%. During the same period, overall university expenditures increased faster than the rate of inflation.

The GAO study indicated that State Appropriations provided 35% of the Educational and General Revenues for its sample in 1975 and 34% in 1984.

The recent changes in service income for major research universities with medical centers will be one of the most difficult areas of change to forecast. Medical services have traditionally been paid for on a cost reimbursement basis. Thus any additional costs associated with teaching hospitals and their associated research missions have been passed on to third party payors. With the advent of prospective payment systems, diagnostic related groups, managed care, limitation on capital pass through, etc., the University Medical Center has been transformed from a creator of resources, for investment in the academic and research enterprises, to a potential consumer of resources.

#### Incentives to Control Costs

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Strong incentives exist to manage universities as efficiently as possible. The following discussion of incentives to control costs is based on the earlier assertion that universities are obliged to constantly scrutinize all elements of cost whether direct or indirect and to strive to keep them at a minimum.

As non-profit organizations operating in a highly competive market faced with extreme pressure on all sources of income, universities have been frugal. They are acutely aware that unnecessary indirect costs are every bit as wasteful as unnecessary direct costs and that such waste affects their ability to fulfill their mission. An example of institutional efforts to minimize costs is the Cost Reduction Incentive Awards program sponsored by the National Association of College and University Business Officers and the United States Steel Foundation, Inc. described in the enclosed brochure.

Indirect costs are distributed to instructional programs and service activities in the same manner as to research and for most colleges and universities the former functions receive a greater share than the latter. Unlike some single-objective organizations such as hospitals, colleges and universities cannot automatically pass through their operating costs to third parties. Economies in indirect costs will, therefore, provide greater benefit to the instruction and service functions where the incentives for savings are the greatest since the bulk of the revenue for them comes from University funds or sources e.g. tuition subject to highly competitive market pressures.

Universities are subject to external oversight by a variety of organizations such as independent public accounting firms, state auditors, federal auditors, peer review groups and accreditation agencies. Each of these groups to some extent is concerned with the overall efficiency of the institution establishing continuing pressure to control costs. Of particular note with respect to indirect costs is the role of federal agencies and their thoroughness in the review and negotiation of indirect cost rates.

Not only are there myriad external reviews of university activities, but internal pressures to avoid waste and increase efficiency are also in effect. These exist in the resource allocation or budgeting process where administrative and other support activities must compete with instruction, research and service programs for limited resources. Institutional oversight groups such as faculty budget committees often have significant impact on budgetary decisions. The faculty, who actually acquire the research funds from which indirect cost recovery is obtained, are the severest critics of high indirect cost rates. It is a common belief among investigators that research proposals which include a high indirect cost rate are at a competitive disadvantage. Investigators continually jawbone to assure that unnecessary supporting activities are not added to "their indirect cost tax."

Recent years have seen ever increasing pressures to reduce costs and increase revenues. The executive agencies as well as Congress have pressed colleges and universities to control indirect costs in spite of arguments that such costs are largely beyond the control of the institutions. Many public institutions have experienced significant reductions in state aid as a result of economic difficulties. Increased regulation of activities by federal, state and local governments have forced universities to spend significant sums to comply with the law of the land. Changes in the methodology of reimbursing health care costs have had major impacts on the service function.

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In summary, indirect costs are one element of a complex financial matrix in which all elements are under continuous scrutiny. Unnecessary indirect costs are as wasteful as are unnecessary direct costs. Essentially, incentives and controlling costs are synonymous. The following points can be made about incentives and cost control: (1) Economies in indirect costs benefit both instructional programs and research; (2) oversight by both federal and state examiners act to control costs; (3) the tenacity with which indirect cost officials negotiate rates controls reimbursement; (4) administrative needs compete with other university needs in the budget process; (5) research investigators usually participate in constructing university budgets and exert substantial influence to keep indirect costs to a minimum; (6) the Congress, agencies and OMB all have joined in recent years to limit indirect reimbursement. This high level pressure has a substantial impact on rates.

\*United States General Accounting Office Publication No. GAO/RCED-86-162BR, July 1986, entitled "University Finances, Research Revenues and Expenditures"