



Memorandum

Date JAN 28 1992
From 
Richard P. Kusserow
Inspector General

Subject Review of Reduced Indirect Cost Rates at Ten Large Research Universities
(A-09-91-04018)

TO
Kevin E. Moley
Assistant Secretary for
Management and Budget

James O. Mason, M.D., Dr. P.H.
Assistant Secretary for Health

The attached audit report examines the practice at **10** universities of entering into sponsored research agreements with indirect cost rates below the rates negotiated with the Federal Government (reduced indirect cost rates). We performed our review at large research universities located throughout the United States for which the Department of Health and Human Services has audit cognizance.

The review was performed, in part, based on an oral request made by Congressman John D. Dingell during hearings before the Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce, House of Representatives, on May 9, 1991. The Subcommittee wanted to know whether the Federal Government was subsidizing the indirect costs for nonfederal research projects with reduced indirect cost rates. The Office of Management and Budget (OMB) Circular A-21 provides guidance for computing indirect cost rates for colleges and universities.

The question of who subsidizes research with reduced indirect cost rates is a function of the methodology used to compute the indirect cost rates. We determined that all of the 10 universities in our review entered into sponsored agreements using reduced indirect cost rates. We also determined that the federally negotiated indirect cost rates were not overstated because of sponsored agreements with other nonfederal entities which used reduced rates.

During our review, we also found that:

- o universities were forgoing a significant amount of revenue because of reduced indirect rates - \$46 million for the year reviewed, or an average of \$4.6 million per university;

- o the Federal Government, in some cases, also received reduced indirect cost rates although not proportional to the benefits received by nonfederal sponsors;
- o the Federal Government was generally not receiving the lowest rate charged for indirect costs, although it was the largest volume purchaser of research;
- o universities seem to be willing to accept lower indirect cost rates because research is part of their purpose and they receive other benefits from conducting such research:
- o in some cases, universities were accepting whatever indirect cost rates buyers were willing to pay, including zero indirect costs;
- o three of the ten universities entered into agreements with foreign governments and most entered into agreements with foreign corporations.

The attached report does not include any recommendations. The OMB made a revision to Circular A-21 (Section G.1.a.(3)), effective October 1, 1991. to add specificity to the requirement to use all elements of an allocation base to compute an indirect cost rate. The Section states:

“Each institution’s indirect cost rate process must be appropriately designed to ensure that Federal sponsors do not in any way subsidize the indirect costs of other sponsors, specifically activities sponsored by industry and foreign governments. Accordingly, each allocation method . . . must contain the full amount of the institution’s modified total costs or other appropriate units of measurement used to make the computations.”

We also found that under OMB Circular A-21, universities can fund research costs from private gift accounts which are classified as instruction, not organized research. We plan to perform a review of this practice to determine the effect on Federal reimbursement and, if appropriate, to recommend ways to change OMB Circular A-21.

If you would like to discuss this report, please call me or have your staff contact Daniel W. Blades, Assistant Inspector General for Public Health **Service** Audits at 443-3582. A copy of this report is being sent to other interested departmental officials.

Attachment

Department of Health and Human Services

**OFFICE OF
INSPECTOR GENERAL**

**REPORT ON THE PRACTICE OF
CHARGING REDUCED INDIRECT COST
RATES FOR CERTAIN SPONSORED
PROJECTS AT TEN LARGE
UNIVERSITIES**



Richard P. Kusserow
INSPECTOR GENERAL

A-09-91 -04018

TABLE OF CONTENTS

EXECUTIVE SUMMARY

BACKGROUND

 Criteria

 Calculation of Indirect Cost Rate

SCOPE, OBJECTIVES AND METHODOLOGY

RESULTS OF AUDIT

 Sponsored Agreements with Low Indirect Cost Rates

 Table A

 Chart A

 Chart B

 Table B

 Some Reasons Universities Enter into Agreements
 Without Full Recovery of Indirect Costs

 Foreign Sponsored Agreements

 Table C

 Gifts and Donations

CONCLUSIONS

 Table D

EXECUTIVE SUMMARY

We reviewed the practice of charging indirect cost rates less than the rate negotiated with the Federal Government (reduced indirect cost rates) for certain sponsored research projects at 10 large research universities located throughout the United States. During our review, we found that:

- o all 10 universities entered into sponsored agreements using reduced indirect cost rates;
- o universities were forgoing a significant amount of revenue because of reduced indirect rates - \$46 million for the year reviewed, or an average of \$4.6 million per university;
- o the Federal Government, in some cases, also received reduced indirect cost rates although not proportional to the benefits received by nonfederal sponsors;
- o the Federal Government was generally not receiving the lowest rate charged for indirect costs, although it was the largest volume purchaser of research;
- o universities seem to be willing to accept lower indirect costs rates because research is part of their purpose and they receive other benefits from conducting such research;
- o in some cases, universities were accepting whatever indirect costs rates buyers were willing to pay, including zero indirect costs;
- o three of the ten universities entered into agreements with foreign governments and most entered into agreements with foreign corporations.

We also found that under the Office of Management and Budget (OMB) Circular A-21 B.I.b., universities can fund research costs from private gift accounts which are classified as instruction, not organized research. We plan to perform a review of this practice to determine the effect on Federal reimbursement and, if appropriate, to recommend ways to change OMB Circular A-21.

INTRODUCTION

BACKGROUND

The OMB Circular A-21 defines organized research and provides principles for determining the costs applicable to research and development, training and other sponsored work performed by colleges and universities under grants, contracts and other agreements with the Federal Government.

Criteria

The OMB Circular A-21 defines the major functions of an institution as instruction, organized research, other sponsored activities and other institutional activities. **Organized** research is defined as all research and development activities of an institution that are separately budgeted and accounted for. The two types of research included in organized research is sponsored and university research. Sponsored research is defined as all research and development activities that are sponsored by Federal and nonfederal agencies and organizations. University research is defined as all research and development activities that are separately budgeted by the institution under an internal application of institutional funds. University research may be considered as a part of the instruction function, or may be combined with sponsored research under the function of organized research, or may be treated as a separate functional activity, as agreed to with the cognizant Federal agency responsible for making such decisions.

Included in the instruction function is departmental research. The departmental research category is defined as research development and scholarly activities that are not organized research and, consequently, are not separately budgeted and accounted for.

The costs of sponsored agreements include both direct and indirect costs. Direct costs are the costs directly identifiable with a sponsored agreement such as salaries of researchers and materials and supplies used in research. Indirect costs are those that are incurred for common or joint objectives and consequently cannot readily and specifically be identified with a particular sponsored activity, instructional activity or any other institutional activity. At large research universities, indirect costs are accumulated in seven pools. For each cost pool, an allocation base is used which is designed to allocate indirect costs in reasonable proportion to the services or benefits received.

The OMB Circular A-21 establishes the principles for determining costs applicable to sponsored agreements at educational institutions. It defines

allowable and unallowable costs and describes indirect cost pools which should be established for accumulating and allocating such costs to research projects. The tests for allowability require that the costs be reasonable, allocable, and consistently applied in conformance with limitations or exclusions established by OMB Circular A-21 or by individually sponsored agreements. The OMB Circular A-21, which prescribes standard allocation bases for each indirect cost pool, also allows an institution to use special cost studies under certain circumstances.

The OMB Circular A-21, section G-2, requires that indirect costs shall be distributed to applicable sponsored agreements on the basis of modified total direct costs (MTDC). The MTDC base includes salaries and wages, fringe benefits, materials and supplies, services, travel and subgrants and contracts up to \$25,000. The costs for subgrants and contracts in excess of \$25,000 and the cost of equipment are not included in the MTDC base.

The OMB made a revision to its Circular A-21 (Section G.1.a.(3)), effective October 1, 1991, to add specificity to the requirement to use all elements of an allocation base to compute an indirect cost rate. The Section states:

“Each institution’s indirect cost rate process must be appropriately designed to ensure that Federal sponsors do not in any way subsidize the indirect costs of other sponsors, specifically activities sponsored by industry and foreign governments. Accordingly, each allocation method . . . must contain the full amount of the institution’s modified total costs or other appropriate units of measurement used to make the computations.”

In addition, at the time an institution submits an indirect cost proposal, it must describe the process that it uses to ensure that Federal funds are not used to subsidize programs funded by industry and foreign governments.

Calculation of Indirect Cost Rate

Each university calculates an indirect cost rate for its on-campus and off-campus research facilities, as appropriate. The indirect cost rate is a ratio, expressed as a percentage, of indirect costs to a direct cost “base.” The direct cost base for large research universities is usually MTDC.

Calculation of the indirect costs determines the average amount of indirect costs associated with each dollar of direct costs included in the MTDC. The indirect cost rate for research at a specific campus is calculated by dividing the total indirect costs applicable to research by the MTDC for research. The resulting indirect cost rate will equitably allocate the indirect costs to benefiting cost

objectives if the MTDC of all benefiting sponsored agreements are included in the denominator. The question of equity is addressed in the manner of calculating the indirect cost rate, that is by determining the average amount of indirect costs associated with each dollar of direct cost included in the MTDC base, not by determining which sponsors are billed and pay indirect costs.

There are several types of indirect cost rates actually used in practice. Institutions are encouraged to use either a predetermined rate or a fixed rate with carry-forward provision. A predetermined indirect cost rate is a permanent rate based on an estimate of costs for a specific future period. This type of rate is not subject to adjustment except under very unusual circumstances. Predetermined rates are established when there is reasonable assurance that it will approximate the institution's actual rate. A fixed rate with carry-forward has characteristics similar to a predetermined rate. However, unlike predetermined rates, the difference between the estimated costs used to establish the fixed rate and the actual costs of the fiscal year covered by the rate is "carried forward" as an adjustment in the rate computation in future year(s).

For clarification and to provide background on how we approached the objective of our audit regarding the potential subsidization of nonfederal research, let us use an example. The following example assumes that the indirect costs of the seven pools used in the cost finding at large research universities have been properly determined for organized research and will be used in a single calculation to compute the indirect cost rate (rather than calculating a rate for each of the seven pools and adding the resultant ratios).

Assume that an educational institution has \$100 million of MTDC research expenditures and has related indirect costs of \$45 million. The \$100 million of direct research costs includes \$90 million incurred on agreements sponsored by the Federal Government and \$10 million sponsored by other government and private organizations. The indirect cost rate for sponsored research would be calculated by dividing the indirect costs of \$45 million by the MTDC research expenditures of \$100 million, yielding a rate of 45 percent. That is, each dollar of direct cost in the MTDC base will be charged 45 cents for indirect costs.

The university would bill each sponsoring agreement for its direct costs plus a 45 percent surcharge applied to the direct costs which meet the criteria to be included in the MTDC base. In this manner the Federal Government would pay \$40.5 million (\$90 million times 45 percent) and the other sponsors would pay \$4.5 million (\$10 million times 45 percent).

If the university chose not to bill indirect costs to the \$10 million of agreements sponsored by other government and private organizations, it would reduce the university's revenue by \$4.5 million but would not affect the amount paid by the

Federal Government. If the university had a fixed rate with carry-forward, the university would not be able to include the \$4.5 million as unrecovered carry-forward because the \$4.5 million would have been recovered if all sponsors had been billed.

However, if the university calculated its indirect cost rate using only the MTDC related to sponsors that were willing to pay for indirect costs, the Federal Government would subsidize the other sponsors. Using the data from the above example, the indirect cost rate for sponsored research would be calculated by dividing the indirect costs of \$45 million by the MTDC research expenditures of \$90 million, yielding a rate of 50 percent. That is, each dollar of direct cost in the MTDC base for sponsors willing to pay for indirect costs will be charged 50 cents. By not including all the appropriate costs in the base, the rate was overstated, in this example by 5 percent (50 percent vis-a-vis 45 percent).

Continuing the example, the university would bill each federally sponsored agreement for its direct costs plus a 50 percent surcharge applied to the direct costs in the MTDC base. The Federal Government would pay \$45 million of indirect costs (\$90 million times 50 percent) and the other sponsors would not pay indirect costs. In this way, the university would recover all of the indirect costs allocated to sponsored projects from the Federal Government. If only the MTDC associated with sponsors willing to pay indirect costs were included in the MTDC base, then those sponsors rather than the particular university would be subsidizing sponsors unwilling to pay indirect costs.

As can be seen by the example, the question of who subsidizes unbilled indirect costs is not affected by billing, but by the methodology of computing the Indirect cost rate. It is with that understanding that OMB's revision of Circular A-21 stated that "each institution's indirect cost rate process must be appropriately designed" to ensure that Federal sponsors do not subsidize the indirect cost of other sponsors.

SCOPE, OBJECTIVES AND METHODOLOGY

The review was made in accordance with generally accepted Government auditing standards, except that the review objectives did not require obtaining an understanding or making an assessment of the overall internal control structure at each school. The objectives of the review were to determine:

- the extent to which selected universities entered into sponsored research agreements with indirect cost rates below rates negotiated by the Department of Health and Human Services (HHS) Division of Cost Allocation (DCA), and
- whether the Federal Government was subsidizing indirect costs for nonfederal research projects through the omission of these costs in the base used to compute the indirect cost rate or through incorrect calculation of a carry-forward amount.

We did not review departmental or university research which, under OMB Circular A-21, universities may classify as part of the instruction function. The review was conducted at 10 of the larger research universities which were assigned cognizance under HHS in OMB Circular A-88. The universities had been judgmentally selected for other audits performed by HHS Office of Audit Services (OAS) during the summer of 1991. Generally, these universities had been selected because the Public Health Service (PHS) provided significant funding and because of their geographical location. Of the 10 universities, 5 were in the top 35 universities receiving funding from PHS in 1989. Based on data prepared by the National Science Foundation, the 10 universities in our review represented about \$1.1 billion, or 13 percent, of total Federal funding of \$8.7 billion for research and development at colleges and universities for Fiscal Year 1989.

The universities included:

- Yale University (Yale) in New Haven, Connecticut,
- Dartmouth College (Dartmouth) in Hanover, New Hampshire,
- Rutgers University (Rutgers) in New Brunswick, New Jersey,
- Johns Hopkins (Hopkins) University in Baltimore, Maryland.
- University of Pittsburgh (Pitt.) in Pittsburgh, Pennsylvania,
- Emory University (Emory) in Atlanta, Georgia,
- Duke University (Duke) in Durham, North Carolina,
- University of Miami (Miami) in Miami, Florida,
- University of Chicago (Chicago) in Chicago, Illinois, and
- University of Southern California (USC) in Los Angeles. California.

To accomplish the objectives of the review, auditors obtained a listing of sponsored research projects from each university identifying nonfederal research projects. The auditors performed the tests necessary to confirm the completeness and accuracy of the listing. In addition, we reviewed the most recent indirect cost proposal to determine whether the costs of all sponsored projects, including those of nonfederal agreements, were included in the modified total direct cost base used to compute the indirect cost rate and to determine that carry-forward, where used, was calculated correctly. We identified sponsored agreements between universities and foreign governments where they existed. However, we were unable to identify all sponsored agreements with foreign organizations because necessary identifying information was not always available in the school's records.

We also interviewed university officials regarding the policy of accepting sponsored research projects with indirect cost rates different than the rate negotiated with DCA. Also, if feasible at the specific universities, we calculated the amount of the unrecovered indirect costs from sponsored projects which did not use the federally negotiated indirect cost rate. Because of the diversity in accounting and reporting systems maintained at the 10 universities, we were able to obtain more detailed information from some universities than others. The work at the individual universities was performed during July and August 1991.

RESULTS OF AUDIT

We determined that all of the 10 universities in our review entered into research agreements with indirect cost rates below the rates negotiated with the Federal Government. By including all the direct costs in the MTDC, the indirect cost rate was properly computed and the rate was not overstated for indirect costs not billed to nonfederally sponsored agreements. However, we did find that under OMB Circular A-21, certain research costs funded from private gift accounts can be excluded from the MTDC base. We plan to perform a review of this practice to determine the effect on Federal reimbursement and, if appropriate, to recommend ways to change OMB Circular A-21.

Although colleges and universities are not required to use a federally negotiated indirect cost rate for privately and other publicly funded research, universities could have received additional funds by using that rate on all sponsored projects. We found that on average, each of the 10 universities could have recovered an additional \$4.6 million for the year reviewed. For a 1-year period, the total unrecovered indirect costs was \$46,107,000. This consisted of \$36,256,000 for nonfederally sponsored research and \$9,851,000 for federally sponsored research at seven of the universities. (See Table A.)

Representatives from the universities provided several reasons for entering into sponsored research agreements with overhead rates below those negotiated with the Federal Government. (See Page 13.) Generally, most universities stated, in one way or another, that it had a greater concern for adding to a body of knowledge in a particular discipline than for obtaining the highest possible indirect cost rate. Some universities also said that awards with low indirect cost rates were accepted for academic reasons such as to help advance the professional development of young researchers or to support graduate students. In some instances, it was necessary to accede to requirements of certain public interest organizations which limit reimbursement of indirect costs. Most universities also had pragmatic reasons, such as that outside funding augments the university's budget, principal investigators wanted the proposals to be competitive with submissions from other researchers or the grant provided for partial payment of faculty salaries.

Congressman John D. Dingell, during hearings on indirect cost on May 9, 1991, noted that some research projects with low indirect cost rates were sponsored by foreign governments. In our current review, we found that 3 of the 10 universities entered into a total of 9 agreements for research with foreign governments. These agreements represented less than 2 percent of nonfederally sponsored agreements for the three schools we reviewed. In addition, there were agreements with foreign corporations which could not be identified. We noted that Federal, State and municipal governments also obtained reduced indirect cost rates. In our review of foreign awards, we also found that the policies of the National Institutes of Health (NIH) seem to parallel what we found at U.S. universities which accepted awards from foreign governments. The NIH policy

prohibits reimbursement of indirect costs to research grants awarded to foreign institutions, international organizations and to U.S. grantees for projects which have a substantial foreign component.

Sponsored Agreements with Low Indirect Cost Rates

We found that all of the 10 universities in our review entered into some sponsored research agreements with lower overhead rates than the rates negotiated by the Federal Government. Table A shows the number of nonfederal agreements with different indirect cost rates by university. The table includes an estimate of the related unrecovered indirect costs for nonfederal and federally sponsored agreements for a 1-year period (generally the fiscal year ended in 1991). The amounts of unrecovered indirect costs appear significant. There is also a relatively large variance among the universities.

TABLE A

SPONSORED RESEARCH WHICH DID NOT USE THE FEDERALLY NEGOTIATED INDIRECT COST RATES AND RELATED UNRECOVERED INDIRECT COSTS FOR A 1-YEAR PERIOD				
<u>Univ.</u>	<u>Number of Nonfederal Awards</u>	<u>Unrecovered Indirect Costs</u>		
		(In Thousands)		
		<u>Nonfederal</u>	<u>Federal</u>	<u>Total</u>
Dartmouth	119	\$ 720	NA	\$ 720
Yale	331	5,203	NA	5,203
Rutgers'	451	3,800	\$3,300	7,100
Hopkins	396	8,000	1,307	9,307
Pitt.	207	1,207	NA	1,207
Miami	78	755	1,334	2,089
Emory	113	889	248	1,137
Duke	711	5,590	1,105	6,695
Chicago	559	6,445	907	7,352
USC	402	<u>3,647</u>	<u>1,650</u>	<u>5,297</u>
	<u>3,367</u>	<u>\$36,256</u>	<u>9,851</u>	<u>\$46,107</u>

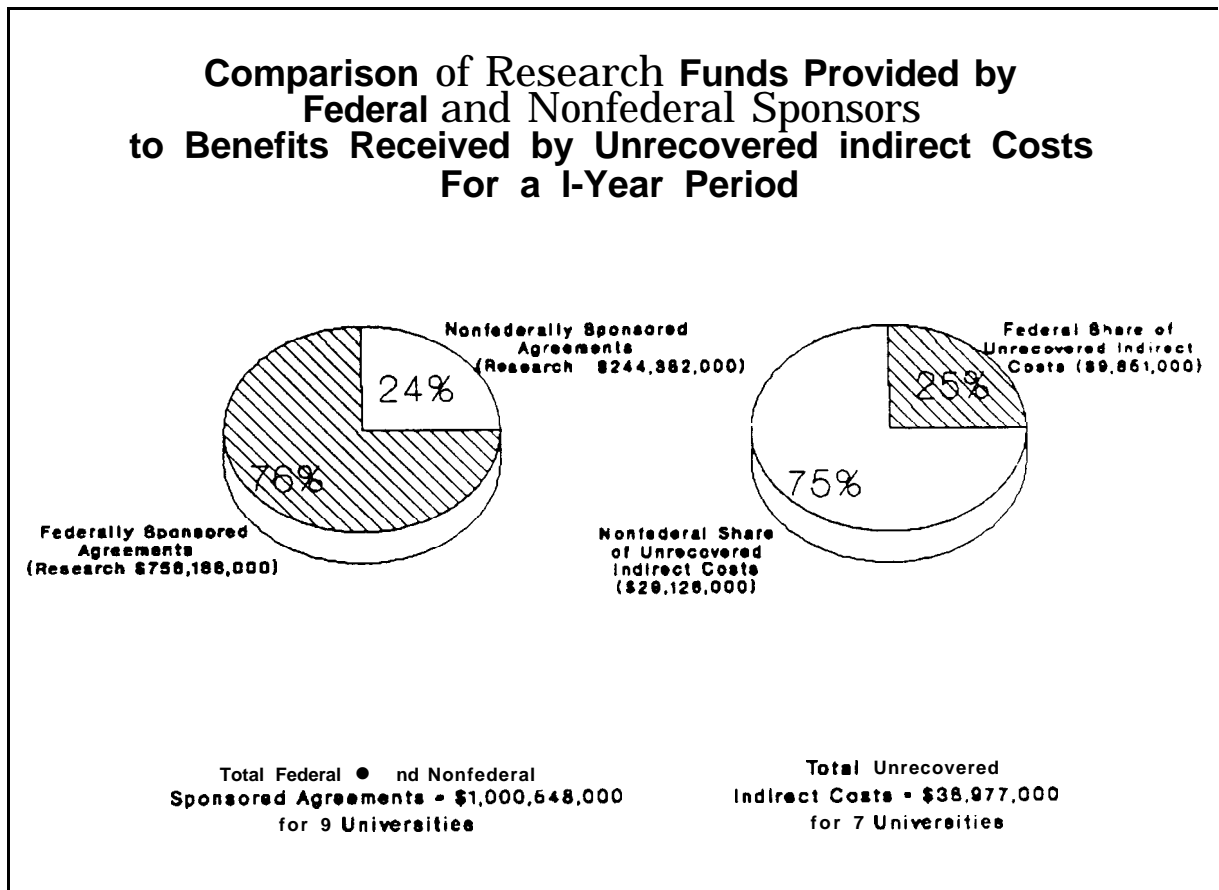
NA: Not Available

. Does not include State sponsored research for which indirect costs are reimbursed by the State appropriation process.

At all 10 universities, we found that the direct costs for the nonfederally sponsored agreements were included in the MTDC base used to compute the indirect cost rate and, consequently, that the Federal Government was not subsidizing indirect costs for nonfederally sponsored research projects at these universities. In addition, for the one university in our review which used a fixed rate with a carry-forward provision, the carry-forward amount did not include any of the unrecovered indirect costs associated with the sponsored projects which did not reimburse full indirect costs. (See example on pp. 4-5 of background section for an explanation of how we made this determination.)

Although we noted that Federal, State and municipal governments benefited from the universities' use of reduced indirect cost rates, the Federal Government did not receive a proportionate share. Based on the data available for the schools in our review, Chart A shows that the Federal Government provided 76 percent of the funding for sponsored projects, but federally sponsored projects accounted for only 25 percent of the unrecovered indirect costs. We found that the Federal Government was generally not receiving the lowest rate charged for indirect costs, although it was the largest volume purchaser of research.

CHART A

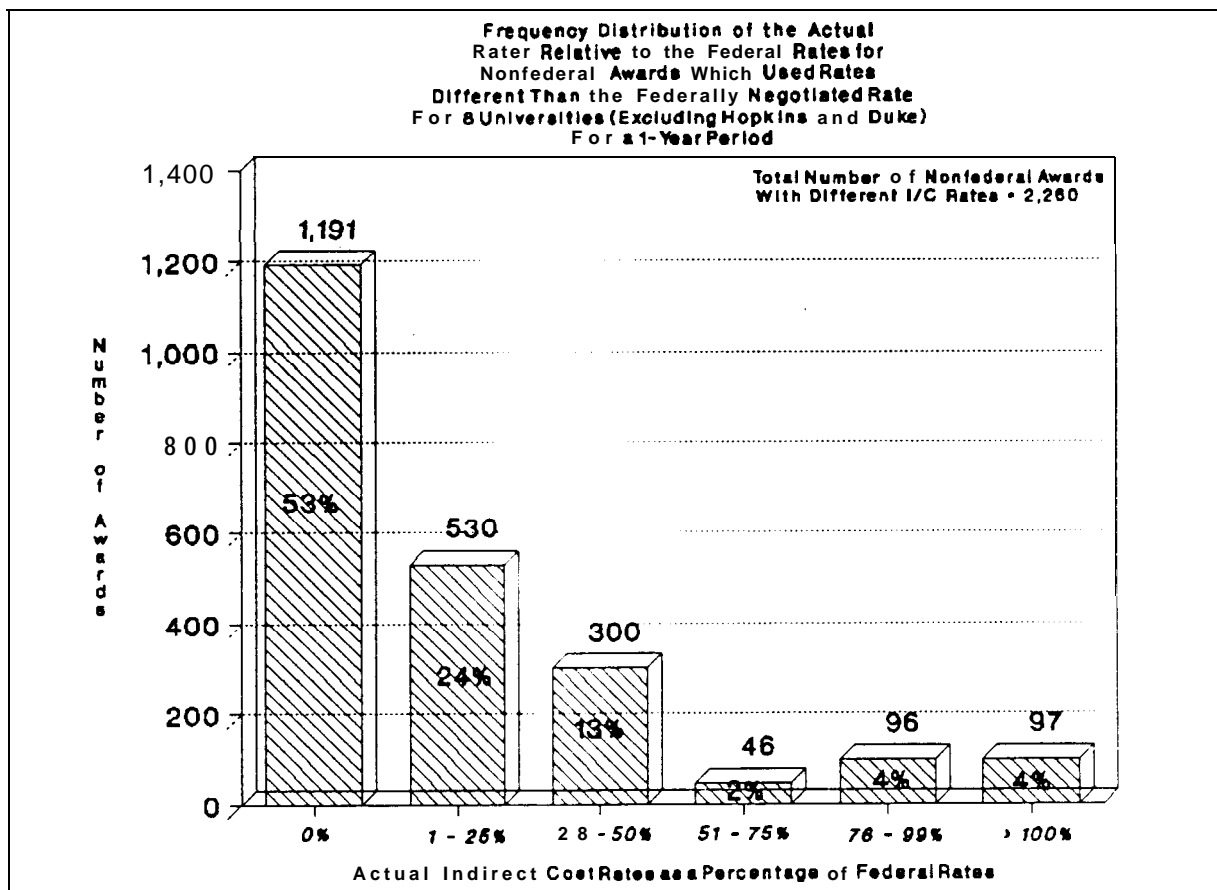


Universities seem to be willing to accept lower indirect cost rates on certain agreements because research is part of the purpose of a university and the university also receives other benefits from industry research. At 8 of the 10 universities we reviewed, we were able to identify the indirect rate charged to nonfederally sponsored agreements. We found that over half (53 percent) of the agreements used an indirect cost rate of zero. The remaining agreements used an indirect cost rate different than the rate each university negotiated with the DCA.

To facilitate comparison of these rates from eight universities, each with a different indirect cost rate, we stated the rate used on each agreement as a percentage of the federally negotiated rate at the appropriate university. That is, a nonfederally sponsored agreement with an indirect cost rate of 10 percent at a university with a federally negotiated rate of 50 percent would have a relative value of 20 percent and would be included in the category 1 to 25 percent in Chart B.

As can be seen in Chart B, 53 percent of the nonfederally sponsored agreements used an indirect cost rate of zero and a total of 90 percent (53 plus 24 plus 13) used a rate designed to recover no more than half of the applicable indirect costs.

CHART B



To estimate the relative amount of unrecovered indirect costs, we compared the unrecovered amounts associated with sponsored agreements to the total potential revenues from indirect costs. There is considerable diversity among the universities. The amount shown for Rutgers does not include \$7.3 million of indirect costs which were not collected from State sponsored awards because those costs are reimbursed through the State of New Jersey's appropriation process. A similar situation may exist at other State supported universities.

Although the relative amount of unrecovered indirect costs can be fairly significant as seen by Table B, the unrecovered amounts are rather small when compared to the entire operation of a university. The percentage of unrecovered indirect costs to total costs at each university was under 1 percent for 7 of the 10 universities and just over 1 percent for the remaining 3 universities. The total expenditures of the university include the cost of research, teaching, feeding and housing students and other activities. The percentages indicate that the amount of indirect costs not recovered is relatively insignificant compared to the entire budget of a university. Our review did not determine how universities financed the reduced revenue related to unrecovered indirect costs.

TABLE B

PERCENTAGE OF UNRECOVERED INDIRECT COSTS TO POTENTIAL REVENUES FROM INDIRECT COSTS FOR A 1-YEAR PERIOD (In Thousands)				
	(A) Unrecovered Indirect Costs	(B) Actual Recovered Indirect Costs	(C) Potential Revenues From Indirect Costs (A)+(B)	Percentage Of Unrecovered Indirect Costs To Potential Revenue From Indirect Costs (A)/(C)
Dartmouth	\$ 720**	\$7,647	\$8,367	9%
Yale	5,203**	50,600	55,803	9%
Rutgers	7,100*	9,600	16,700	43%
Hopkins	9,307	53,317	62,624	15%
Pitt.	1,207**	11,061	12,268	10%
Miami	2,089	61,150	63,239	3%
Emory	1,137	79,904	81,041	1%
Duke	6,695	30,381	37,076	18%
Chicago	7,352	34,008	41,360	18%
USC	5,297	42,196	47,493	11%
Total	<u>\$46,107</u>	<u>\$379,864</u>	<u>\$425,971</u>	
*	Does not include indirect costs for State sponsored research for which indirect costs are reimbursed through the State appropriation process.			
**	Does not include unrecovered indirect costs related to Federal grants and contracts.			

Some Reasons Universities Enter into Agreements Without Full Recovery of Indirect Costs

Universities seem to be willing to accept lower indirect cost rates because research is part of their purpose and they receive other benefits from conducting such research. Representatives from the universities provided several reasons for entering into sponsored research agreements with overhead rates below those negotiated with the Federal Government. Generally, most universities stated that it had a greater concern for adding to a body of knowledge in a particular discipline than for obtaining the highest possible indirect cost rate.

In addition, some universities provided other reasons, which ranged from altruistic to pragmatic, for accepting research agreements which did not provide for full recovery of indirect costs:

- The university would accept awards for young scholars to help advance their professional development.
- Some organizations which act in the public interest are restricted by their charter or Board of Directors to prohibit or limit reimbursement of indirect costs.
- Some grant applications represent requests for new money or a new initiative.
- Some grants provide for funding in a priority research area or in some way provide the university with a competitive advantage.
- Some grants include an option on a licensing agreement which could generate royalties.

Although we did not evaluate the proposals which included less than the full recovery of indirect costs which the universities declined to accept, some universities accepted most offers to fund research. For example, 5 of the 10 universities stated that awards without full recovery of indirect costs are acceptable because these universities did not want to lose the opportunity to perform the proposed research or to lose any funds that might augment the university's budget or pay for faculty salaries.

Foreign Sponsored Agreements

We found that 3 of the 10 universities in our review entered into 9 agreements to perform research for foreign governments and most entered into agreements with foreign corporations. Of the nine agreements, seven had an indirect cost rate of zero. The remaining two agreements had indirect cost rates of 5.2 and 15 percent. Table C shows the number of agreements with these governments compared with all nonfederally sponsored research by university.

TABLE C

AWARDS SPONSORED BY FOREIGN GOVERNMENTS FOR A 1-YEAR PERIOD			
<u>University</u>	<u>Number of Awards Sponsored by Foreign Governments</u>	<u>Total Nonfederal Awards</u>	<u>Percentage of Nonfederal Awards</u>
Johns Hopkins	6	564	1.1
Pitt.	2	290	0.7
Duke	<u>1</u>	<u>895</u>	0.1
Total	<u>9</u>	<u>1,749</u>	

We found that the HHS, similar to some foreign governments, generally does not include a provision for indirect costs when the research is conducted at a foreign institution. The policies of the NIH prohibit reimbursement of indirect costs to research grants awarded to foreign institutions, international governments and to U.S. grantees for projects which have a substantial foreign component. Although we did not perform a review of HHS grants to determine if this policy was followed, we did learn that another OAS review of the award process at NIH found an example of a grant which the National Institute on Aging awarded to the University of Kuopio in Finland for \$649,000 for which indirect costs were not allowed.

In addition to foreign governments, universities also enter into sponsored research agreements with foreign organizations and foreign-based multinational corporations. A list of some of these organizations is included in Table D. We were unable to determine all of these corporations because of a lack of identification in the records. Some of the organizations included in Table D may have been a U.S. corporation when an agreement was initiated and subsequently been purchased by a foreign-based multinational corporation.

Gifts and Donations

Although the scope of this review was limited to an evaluation of sponsored agreements, we found that some universities receive gifts and donations which under a provision in OMB Circular A-21, are not treated as sponsored projects even though the projects funded by restricted gifts may meet the criteria used to define organized research (i.e., sponsored projects). Under OMB Circular A-21, a university has the option to classify departmental research, which is supported with university funds, as instruction rather than organized research.

At one university where we audited the indirect cost proposal in conjunction with this review, we evaluated the way restricted gifts and donations were used to fund research projects. We found that the university included \$14.5 million of expenditures funded from private gift accounts as instruction. Although these funds were not based on contracts or grant awards, they were funds from private sources for specific research efforts which we believe should have been included in the research base. This issue, which in part relates to the definition of sponsored research, also involves an accounting issue of consistency.

The university did not treat the space used to conduct research funded by restricted gifts consistent with the direct charges for that research. The square footage of the space related to those research activities was assigned to organized research. In this way, the costs of the space and equipment used was allocated to organized research primarily funded by Federal funds. However, the direct costs of research which the university charged to restricted accounts and classified as instruction were not included in the MTDC base to compute the indirect cost rate. We recommended that the \$14.5 million be moved from instruction to research. This reduces the space related costs of the indirect cost rate.

We did not determine the extent of this problem at the other nine universities. The scope of our review included sponsored projects, those based on contracts, grants or cooperative agreements. Consequently, we are unable to estimate the potential savings associated with revising OMB Circular A-21. We plan to perform a review of this practice to determine the effect on Federal reimbursement and, if appropriate, to recommend ways to revise OMB Circular A-21.

Conclusions

We found that all 10 universities in our review entered into nonfederally sponsored agreements which included less than full recovery of indirect costs as compared to the federally negotiated indirect cost rate. As a result of this practice, universities did not recover all indirect costs applicable to organized

research. Universities were forgoing a significant amount of revenue because of reduced indirect costs. We found that on average, each of the 10 universities could have recovered an additional \$4.6 million for the year reviewed.

The Federal Government, in some cases, also received reduced indirect cost rates, although not proportional to benefits received by nonfederal sponsors. Based on data at the universities reviewed, we found that the Federal Government sponsored 76 percent of the organized research, but federally sponsored agreements received only 25 percent of the discount from unrecovered indirect costs. We found that the Federal Government was not receiving the lowest rate charged for indirect costs, although it was the largest volume purchaser of university research.

Universities seem to be willing to accept reduced indirect cost rates because research is a primary objective of the 10 universities in our review. In addition, universities receive benefits from conducting research. Generally, the universities gave educational, altruistic and pragmatic reasons for entering into such agreements. For example, a university often stated that it had a greater concern for adding to a body of knowledge in a particular discipline than for obtaining the highest possible indirect cost rate. In addition, many nonfederal sponsors either prohibit or limit reimbursement of indirect costs. A university would usually accept the limitations under those agreements rather than risk losing the opportunity to perform the research project or lose research funding which may help pay for staff salaries. In some instances, universities were accepting whatever indirect cost rates buyers were willing to pay, including zero indirect costs.

We found that 3 of the 10 universities in our review entered into 9 agreements with reduced indirect cost rates with foreign governments. Of the nine agreements at these universities, seven had an indirect cost rate of zero. The remaining 2 agreements had indirect cost rates of 5.2 and 15 percent. In addition, universities are entering into these types of agreements with foreign organizations.

We also determined that each of the 10 universities included all appropriate costs of sponsored agreements in the MTDC base used to calculate the indirect cost rate. By including all the direct costs in the MTDC, the indirect cost rate was properly computed and the rate was not overstated for indirect costs not billed to nonfederally sponsored agreements. However, we did find that under OMB Circular A-21, certain research costs funded from private gift accounts can be excluded from the MTDC base. We plan to perform a review of this practice to determine the effect on Federal reimbursement and, if appropriate, to recommend ways to revise OMB Circular A-21.

TABLE D

**SELECTED FOREIGN GOVERNMENTS, ORGANIZATIONS
AND MULTINATIONALS WHICH ENTERED INTO
SPONSORED AGREEMENTS WITH UNIVERSITIES**

Governments

Arab Republic of Egypt
Austrian National Tourist Office
Canadian Embassy
Egyptian Education Bureau
France

National Council of Development - Brazil
Spain
Swedish NIPFH
United Nations

Drug Companies

Boots
Burroughs Wellcome
Ciba-Geigy
Fujisawa Pharmaceutical
Glaxo
Hoffman La Roche

Imperial Chemical Industries
Miles
Pharmacia, Inc.
Sandoz
Schering Aktiengesellschaft
Smith Kline Beechem

Universities

University of Barcelona

Other

British Petroleum
Institute of Merieux
Kidney Foundation of Canada
Korean Research Foundation
Lyonnaise Des Eaux
NATO

Nestec Ltd. Research Center
Stockholm Environmental Institute
Shell Company
Toshiba
World Health Organization