DOCUMENT RESUME

ED 327 110 HE 024 134

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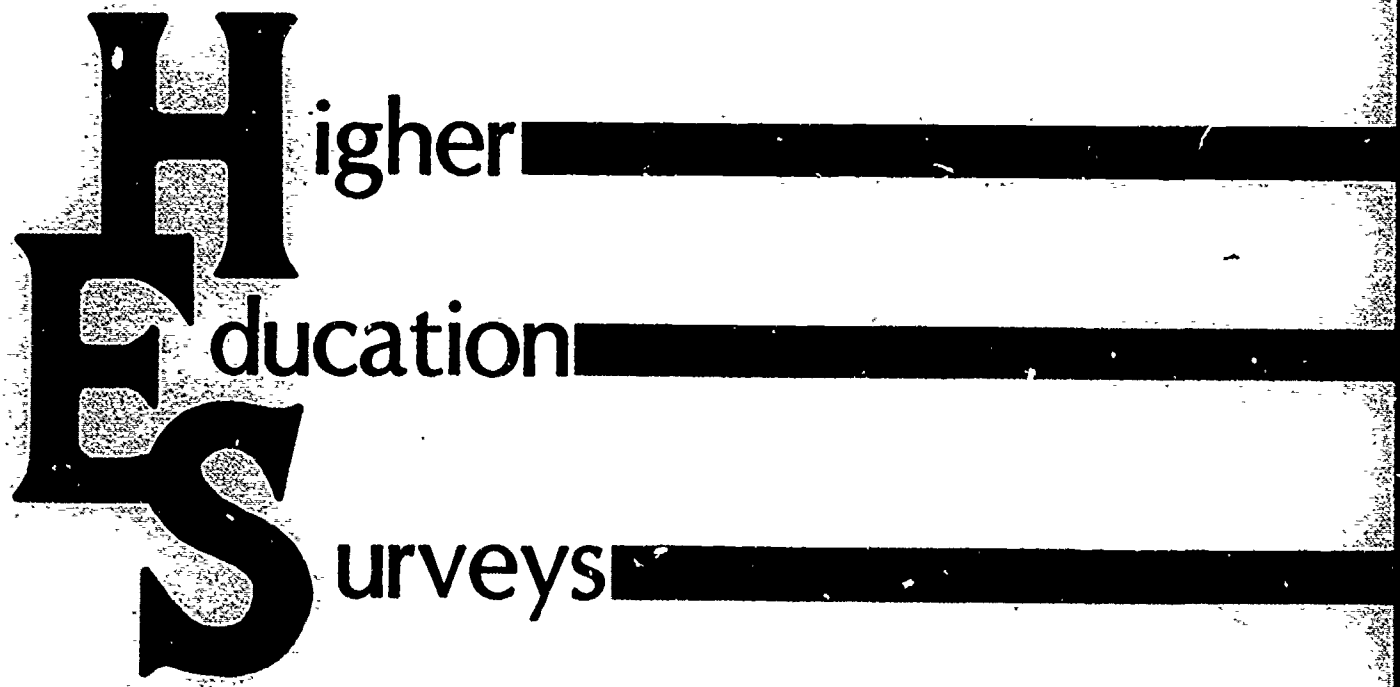
TITLE The Finances of Higher Education Institutions. Higher Education Survey, Survey Report Number 8.
INSTITUTION Westat, Inc., Rockville, MD.
SPONS AGENCY Department of Education, Washington, DC.; National Endowment for the Humanities (NFAH), Washington, D.C.; National Science Foundation, Washington, D.C.
PUB DATE Nov 90
NOTE 82p.
PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS College Applicants; *Educational Finance; Enrollment; Expenditures; Federal Aid; Fees; Higher Education; *Private Colleges; *Public Colleges; School Surveys; *Student Costs; Student Financial Aid; Trend Analysis; *Tuition

ABSTRACT

As part of the congressionally mandated Higher Education Cost Study, a Higher Education Survey (HES) was conducted to provide reliable national estimates on the financial condition of higher education and the sources of tuition increases as perceived by financial officers at higher education institutions. Questionnaires were mailed to financial officials at 473 higher education institutions, excluding specialized schools (e.g. medical schools, dental schools, etc.). Results indicated that (1) respondents were more satisfied with their institutions' ability to control expenditure than with their ability to obtain revenue; (2) tuition and fees increased at a rate between two and three times the rate of inflation from 1980-1981 to 1988-1989. Public institutions identified the greatest impact on tuition as coming from a combination of state tuition policy requirements and a decrease in the proportion of state/local funding. Private institutions regarded the greatest impact on tuition as coming from an increase in operating expenditures, increased institutional student aid, and a decrease in the proportion of Federal funding. Financial officials felt, however, that increases in tuition would have little effect on the number of students applying for admission to their institutions. Appended are 21 tables, technical notes, and the survey questionnaire. (LT)

THE FINANCES OF HIGHER EDUCATION INSTITUTIONS



Higher Education Survey Report
Survey Number 8
November 1990

A Survey System Sponsored by the National Science Foundation, the National Endowment for the Humanities, and the U.S. Department of Education

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Surveys

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Highlights

Results of a HES survey of financial officials at higher education institutions offer the following information about the officials' perspectives on their institution's finances.

- Financial officials were very satisfied with their institution's ability to control expenditures--more so than with their institution's ability to obtain revenues. Over four-fifths rated their institution's ability to control expenditures as either *excellent* or *good*; only half of institutions had the same ratings for their ability to obtain revenues.

- From a list of nine types of nonacademic expenditures, financial officials most often selected *insurance costs* (37 percent), *marketing and recruiting costs* (29 percent), and the *costs of administrative computing* (27 percent) as contributing most to the increase in nonacademic expenditures between 1980-81 and 1987-88.

- From a list of 15 actions that might help control costs, the actions picked by financial officials most often as having a *great* impact on controlling costs were *implementing institution-wide budget cuts* (28 percent), *delaying or modifying new construction* (24 percent), or *increasing the use of part-time faculty* (21 percent). These three actions were reported by financial officials to have been taken by 58, 42, and 62 percent of their institutions, respectively.

- For each of 12 factors provided on the questionnaire as possibly being related to tuition increases, a vast majority of the financial officials indicated that the factor had occurred at their institutions. Among the 12 factors, the following were most often selected as having a *great* effect on tuition increases:

  - An *increase in academic expenditures* (44 percent),
  - An *increase in operating expenditures* (39 percent),
  - *State tuition policy requirements* (37 percent), and
  - A *desire to improve the quality of the institution* (35 percent).

- Financial officials felt that increases in tuitions would have little effect on the number of students applying for admission to their institution. Two-thirds said that, if their institution had implemented a 5 percent increase in tuition for the year over and above any increase actually implemented, there would be less than a 2 percent effect on the number of applications received. Financial officials representing institutions with tuitions over $5,000 were more likely to expect a reduction in applications to result from raising tuitions.

THE FINANCES OF HIGHER EDUCATION INSTITUTIONS

Sponsored by and written for:

Planning and Evaluation Service
Office of Planning, Budget and Evaluation
The U.S. Department of Education

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Acknowledgments

This survey of The Finances of Higher Education Institutions was conducted by Westat, Inc., at the request of the Planning and Evaluation Service of the Office of Planning, Budget and Evaluation within the U.S. Department of Education, and under the direction of the Division of Science Resources Studies of the National Science Foundation. The following persons assisted in developing the study and provided technical review for the study and report:

- Daniel Goldenberg, Planning and Evaluation Service, Office of Planning, Budget and Evaluation, U.S. Department of Education
- Robert Berls, Office of Planning, Budget and Evaluation, U.S. Department of Education
- Patricia White, HES Program Officer, Science and Engineering Education and Human Resources Program, Science and Engineering Education Sector Studies Group, National Science Foundation

Other individuals who contributed to the questionnaire design and presentation of survey results include the following:

- Gregory Henschel, Planning and Evaluation Service, Office of Planning, Budget and Evaluation, U.S. Department of Education
- Maureen McLaughlin, Planning and Evaluation Service, Office of Planning, Budget and Evaluation, U.S. Department of Education

From Westat, Debbie Alexander was the data preparation supervisor for the survey, and Sheila Heaviside supervised the telephone followup.

We also acknowledge the indispensable contribution of the many officials, faculty, and staff members at the sampled institutions who completed the survey questionnaires.

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Introduction

The cost to students of obtaining a higher education has been rapidly increasing, at twice the rate of inflation over the period 1980-88. This increase has led to concerns over the accessibility of higher education, particularly for low- and middle-income families.

This report is part of a larger study mandated by Congress that is being conducted by the Office of Planning, Budget and Evaluation (OPBE) within the U.S. Department of Education. Congress asked the Department to:

- Identify the current cost of obtaining a higher education and determine how that cost has changed in recent years;
- Determine the specific causes of changes in cost and the extent to which those causes have contributed to changes;
- Forecast the future cost of obtaining a higher education with consideration given to prospective demographic changes in student enrollments;
- Evaluate the impact of changes in cost on institutions of higher education, their students, and lower- and middle-income families;
- Make recommendations on how changes in cost can be minimized in the future; and
- Outline State and Federal policy options which may help to minimize changes in cost in the future.

The focus of this report is to describe how officials responsible for finances at higher education institutions perceive the level of tuition increases and the causes of those increases. As such, it is intended to provide direct information on the decisionmaking process used to set tuitions, and to complement other planned studies that analyze institutional decisions based on existing institutional and financial data. In addition, the survey is designed to obtain nationally representative data on specific factors contributing to the recent growth in expenditures, actions taken by institutions that might help control costs, and the perceived effect of these actions. These data currently either do not exist or exist only for a small number of institutions.

Opinion data may be biased if the financial officials provide answers that are a defense against public criticism of their tuition increases, or if officials of these institutions are simply mistaken in their impressions. Also, because of the nature of the survey, the questions asked were subjective and called for financial officials' impressions regarding the effects of certain activities rather than specific numerical estimates of these effects. Where feasible, other components of the OPBE study will seek to verify the findings here by examining other types of data. However, in many cases the survey responses will represent the only existing data regarding certain issues and, hence, are valuable even given these limitations.

This report is based on a survey of financial officials at 473 higher education institutions (excluding specialized institutions, such as medical and dental schools, law schools, and theological seminaries). They were asked to provide data on the finances of their institution (both costs and revenues), focusing primarily on the period 1980-81 through 1988-89. Included were actions their institutions have taken that might affect expenditures or revenues, and the impact of these actions; how changes in expenditures compared to the rate of inflation; factors that had the greatest impact on expenditures; factors that were related to tuition and fee increases; and information on institutions' enrollment, tuition, fees, and room and board charges.

This report will discuss tuition increases at higher education institutions with respect to both the dollar amounts and percentage level of increases and the types of schools and number of students affected. Then the financial officials' perception of the general financial condition of the institutions will be reviewed, including an examination of their opinions on revenues, expenditures, and management practices. Finally, an attempt will be made to isolate those factors that financial officials feel most affect tuition increases.

In general, findings are presented in this report using four major categories: institutional control (public/private), type (doctoral, comprehensive, baccalaureate, two-year), enrollment size (small = less than 1,000, medium = 1,000-4,999, large = 5,000 or more), and region (Northeast, Central, Southeast, West). (Definitions of the four institutional types are in Appendix B.) Also, where relevant, institutions are examined according to major instructional level (i.e., undergraduate and graduate) and financial data is presented by control, degree and residency (undergraduate and graduate tuitions at private institutions, and undergraduate and graduate tuitions, by in-state and out-of-state residence status at public institutions).

Tuition Levels

Financial officials were asked to give their 1988-89 in-state and out-of-state tuition and required fees for both undergraduates and graduates and to estimate those charges for 1989-90. Tuition levels can vary widely even within a single institution, so financial officials were asked to provide the typical tuition and fees for a full-time student. Data were also obtained for 1980-81 from the Department of Education's Higher Education General Information Surveys (HEGIS) data file to determine increases in tuition over time. It should be noted that the tuition data reported here will differ from that published in other sources because these are based on a sample of institutions and are reported on a per institution level rather than the more commonly reported per student level.[1] Tuition data are normally reported on a per student basis, which is calculated by taking the tuition and fees for the entire academic year and weighting them by the number of full-time equivalent undergraduates (not adjusting to reflect student residency). Per institution figures reported here are the average weighted typical tuition for full-time students for the full academic year.

[1]Tuition is reported here on a per institution basis because the focus of the report is institutions, not students, and the "typical cost" an institution charges is desired, not "what a typical student pays." Tuitions have been rounded to the nearest hundred due to sampling variability. Percentage calculations based on tuitions have been based on the actual estimates.

In discussing tuition and tuition changes, one must account for the great differences among the institutions. Most significantly, the differences between public and private institutions, and the differences between in-state and out-of-state tuitions at public institutions, are so great that a meaningful analysis must include these categories.[2]

When discussing tuitions at public institutions, this report will focus primarily on the tuitions for in-state students, since the typical student would be a resident of the state.

Tuition Levels in 1988-89

The mean undergraduate tuition per institution in 1988-89 was $1,000 for in-state students at public institutions, $2,900 for out-of-state students at public institutions, and $6,600 for private institutions (Appendix Table A-1). Thus, tuition at private institutions was almost seven times higher than the in-state tuition at public institutions. The disparity between public and private institutions can be further highlighted by the fact that the highest in-state tuition charged for any public institution in the sample was $3,836, which was lower than the tuition for 90 percent of the private institutions. In short, it is not appropriate to define a typical tuition for an institution without knowing more about the institution and possibly the student's residency.[3]

The importance of distinguishing between public and private institutions is heightened when the enrollment distribution is examined. Public institutions enrolled 78 percent of full-time undergraduates, 88 percent of part-time undergraduates, 63 percent of full-time graduate students, and 67 percent of part-time graduate students. Thus, the great majority of the students, particularly at the undergraduate level, were faced with relatively low tuition levels (i.e., substantially lower than the average tuition level per institution).

Figure 1 displays the relative enrollment at public and private institutions at various tuition levels. The greatest number of students at public institutions were at institutions charging an in-state tuition of $1,000-1,999; the next largest group was at institutions charging less than $1,000. Institutions charging less than $1,000 were actually more common than those charging $1,000-1,999, but the schools were smaller and served fewer total students.

There was tremendous variation among private institutions in the sample, with tuitions ranging from $1,720 to $16,785. However, the more expensive institutions had the greater average enrollments. Private institutions with tuitions of $8,000 or more comprised 26 percent of all private institutions,

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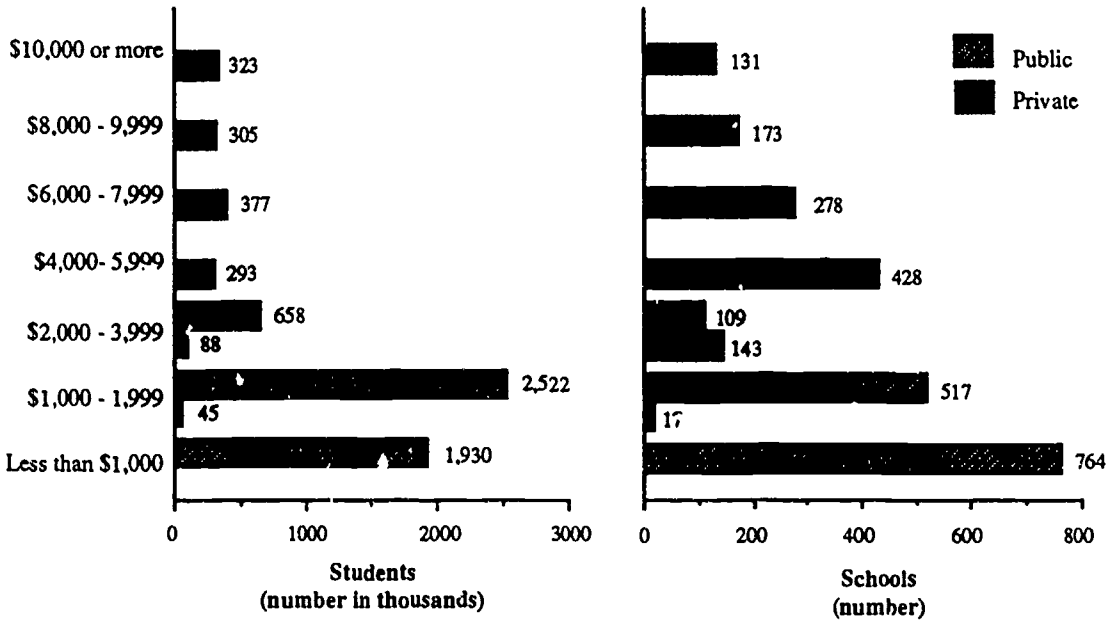
[2]Many local public institutions have three tuition rates: for local residents, for in-state (but not local) students, and for out-of-state students. However, local public institutions tend to have much lower tuitions than other institutions, and the differences among the three tuition levels are small relative to the differences among institutions. Thus, the text does not distinguish between the two in-state levels.

[3]Because the distinction between public and private institutions is so important, it should also be noted that the other classification variables in this analysis are often closely related to institutional control. For example, 83 percent of baccalaureate institutions are private, while 70 percent of two-year institutions are public; also, 86 percent of small schools are private, while 88 percent of large schools are public. See Appendix B for additional information on these interrelationships.

Figure 1. Number of students and higher education institutions by 1988-89 in-state undergraduate tuition levels and institutional control: United States



NOTE: The number of students shown is the total number of full-time undergraduate students, not the number paying a given level of tuition. Out-of-state students at public institutions pay a higher tuition than others at the same institutions. Also, some students receive full or partial tuition waivers, thus paying less than others at the same institutions.

SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (1989 survey).

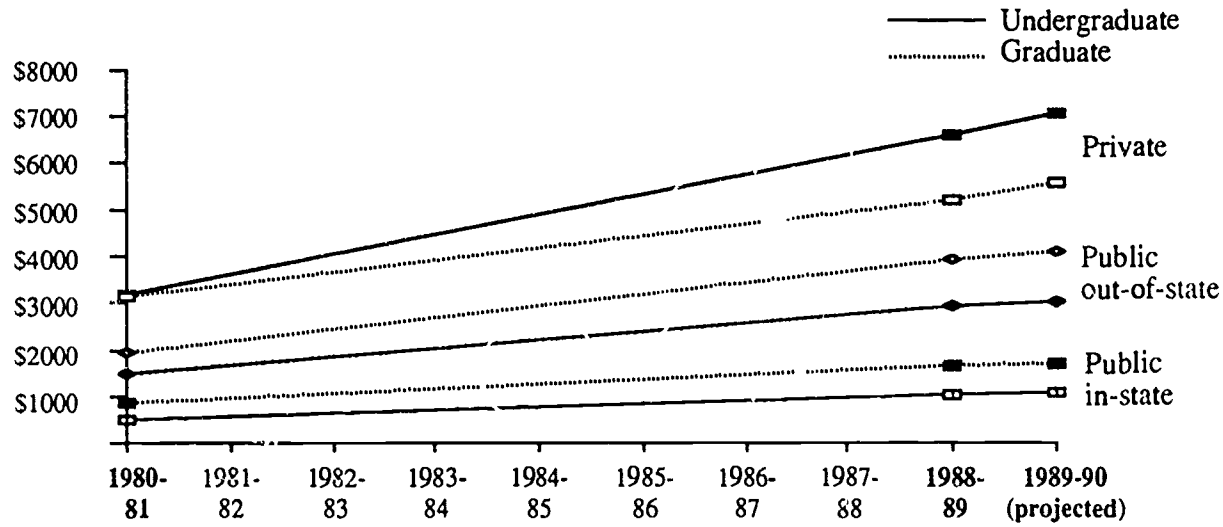
and had 44 percent of the enrollment. Private institutions with tuitions of less than $4,000 comprised 14 percent of all private institutions, and had only 9 percent of the enrollment. The net effect of this is to magnify the differences in tuition per student. On a per institution basis, the mean private tuition was $6,600, well above both the in-state and out-of-state tuitions at public institutions. Yet on a per student basis, the mean private tuition was even greater at $7,800.

Increases in Tuition from 1980-81 to 1988-89

Overall, tuition and fees increased at a rate between two and three times the rate of inflation from 1980-81 to 1988-89. The median increases per institution in tuition and fees for undergraduate students were 108 percent for in-state students at public institutions, 88 percent for out-of-state students at public institutions, and 107 percent at private institutions (Appendix Table A-2).[4] Increases for graduate students were a median of 97 percent for in-state students at public institutions, 113 percent for out-of-state students at public institutions, and 91 percent for private institutions. These increases amount to approximately 6 to 7 percent increases per year over that time.

Thus, tuition at public and private institutions grew at similar percentage rates. However, private institutions typically have higher tuitions than public institutions, so the increase in dollars was much greater for private than for public institutions, widening the actual dollar amount of the gap in tuition between these two types of institutions (Figure 2). According to financial officials' projections, that gap would widen further in 1989-90; officials at private institutions projected both higher percentage and dollar increases over 1988-89 than those at public institutions.

Figure 2. Mean undergraduate and graduate "typical" tuitions by control of institution: 1980-81, 1988-89, and projections for 1989-90: United States



SOURCE. Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U S Department of Education, 1990 (1989 survey).

[4]The median is used rather than the mean because some institutions showed an extremely large percentage increase in their tuitions after having low tuitions in 1980-81. The median is less sensitive than the mean for such extreme values. For example, 12 institutions in the sample had no tuition and fees for in-state students in 1980-81, but reported tuition and fees ranging from $50 to $150 in 1987-88. The increase in dollars was small, but the percentage increase was quite large (even if the value $1 is substituted for $0 to avoid dividing by zero).

Most differences that did appear among institutions in their rates of increase were not consistent enough to justify conclusions. For example, while the tuition for out-of-state students at public institutions increased at a slower rate than for in-state students at the undergraduate level, the relationship was reversed at the graduate level. However, the most consistent differences were found among doctorate-granting and large institutions, both of which raised their tuitions at or above the rate for all institutions for every combination of institutional control, graduate or undergraduate degree status, and in-state or out-of-state residency.

Room and Board

Financial officials were asked to give their institution's typical room and board charges for 1988-89 and 1989-90. In some cases, room and board charges varied even within a single institution (e.g., institutions often offer multiple meal plans, depending on the number of meals a student eats per week at the institution). So, for the sake of uniform reporting, financial officials were asked to provide the charges for the plan most commonly used. As with tuition and fees, the analysis of institutional characteristics (type, enrollment size, and region) will first control for differences between public and private institutions.

The mean "typical" room charge per institution in 1988-89 was $1,150 at public and $1,550 at private institutions, and the mean board charges were comparable to the room charges at $1,200 for public institutions and $1,550 for private institutions (Appendix Table A-3).[5] Financial officials predicted increases of roughly $50 to $100 apiece for room and board in 1989-90.

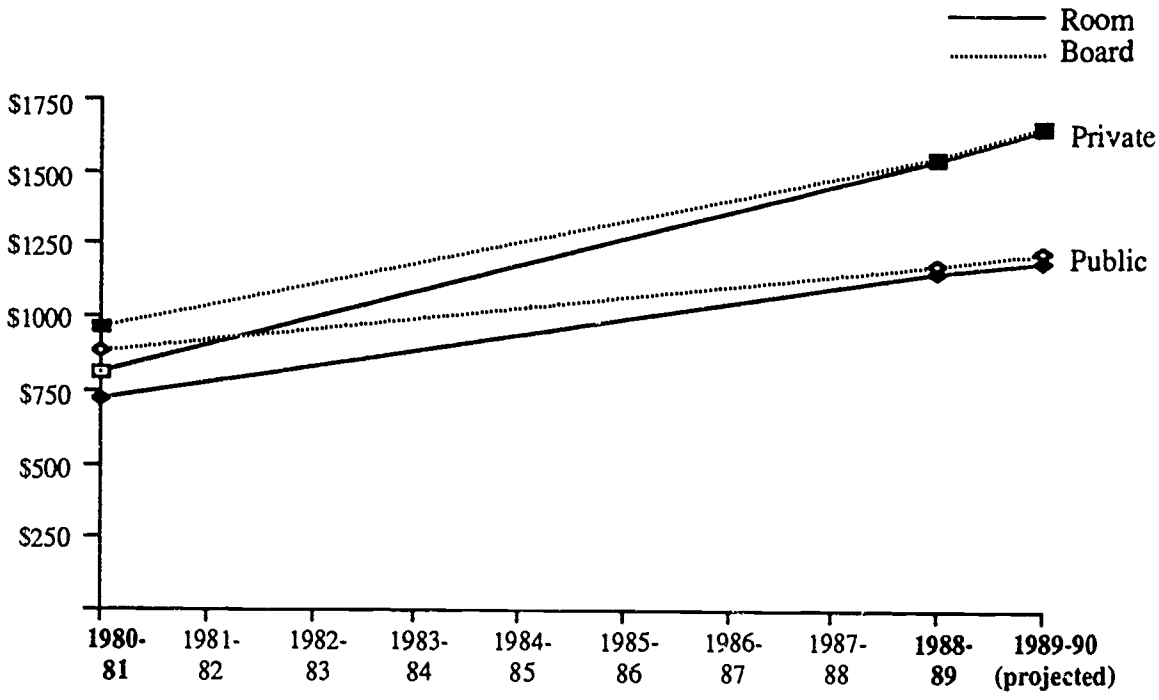
Financial officials at public institutions consistently reported lower charges than those at private institutions for every institutional type, size, and region category used, though the amount of the difference varied and in a few cases was not statistically significant. Overall, financial officials at private institutions reported charges of an additional $400 for room and $350 for board, but the differences were greatest for those reported for doctorate-granting institutions ($700 for room and $550 for board) and large institutions ($700 for room and $500 for board).

Other differences among charges reported for institutions also existed. Room charges given by financial officials for 1988-89 were greatest at doctorate-granting institutions ($1,550 at public institutions and $2,250 at private institutions), and least for two-year public institutions ($850). They also were greater for institutions in the Northeast ($1,700 at public institutions and $2,000 at private institutions) than for institutions in other regions ($1,000-$1,050 at public institutions and $1,200-$1,400 at private institutions), and for large private institutions ($2,050) than for small private institutions ($1,350).

[5] Room and board charges have been rounded to the nearest $50 due to sampling variability. Zero values were included in the calculation of means if they were reported, while cases with missing values were excluded from the calculations.

The rate of increase in room charges was 59 percent for public institutions and 90 percent for private institutions over the period 1980-81 to 1988-89. Board charges increased at lower rates, namely 33 percent for public institutions and 61 percent for private institutions. With private institutions not only having greater room and board charges in 1980-81 but also showing greater rates of increase, the dollar amount of the increase was roughly twice as large for private institutions as for public (Figure 3).

Figure 3. Mean room and board charges by control of institution: 1980-81, 1988-89, and projections for 1989-1990: United States



NOTE: Data for 1980-81 were obtained from the U.S. Department of Education's Higher Education General Information Surveys (HEGIS).

SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (1989 survey).

The Financial Condition of Higher Education Institutions

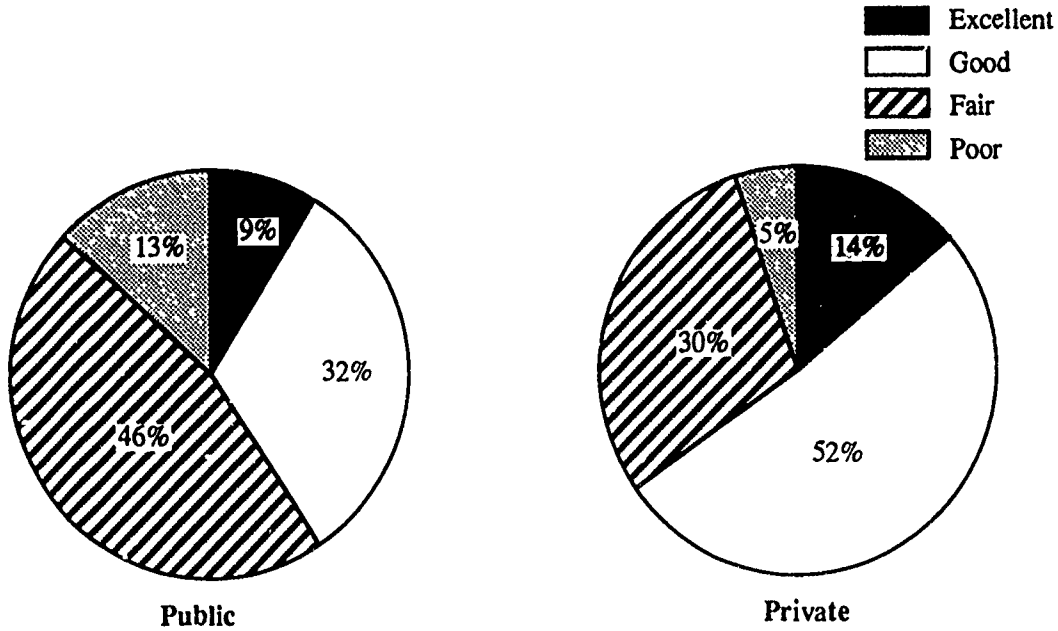
Financial officials at higher education institutions were asked to rate their institution's ability to raise revenues (as *excellent*, *good*, *fair*, or *poor*), and to control costs. They also were given lists of actions and management initiative that might affect their institution's financial condition, and asked to indicate their impact. For several categories of both academic and nonacademic expenditures, financial officials were asked whether costs had risen more rapidly than the rate of inflation between 1980-81 and 1987-88.

Revenues

The great majority of financial officials rated their institution's ability to obtain revenues as either *good* (41 percent) or *fair* (39 percent); only 11 percent rated their institution's ability to obtain revenues as *excellent*, while 9 percent said it was *poor* (Appendix Table A-4).

Financial officials at private institutions were much more likely to rate their institution's ability to raise revenues as either *excellent* or *good* (65 percent) than were financial officials at public institutions (41 percent; Figure 4). This may be related to the difference in tuitions noted earlier and to private institutions' greater ability to control tuition rates. Another large difference appeared by region: financial officials at institutions in the Northeast were more likely to rate their ability to obtain revenues as *excellent* or *good* (71 percent) than those at institutions in the Central region or the West (41 percent).

Figure 4. Financial officials' perceptions of their institution's ability to raise revenues: United States

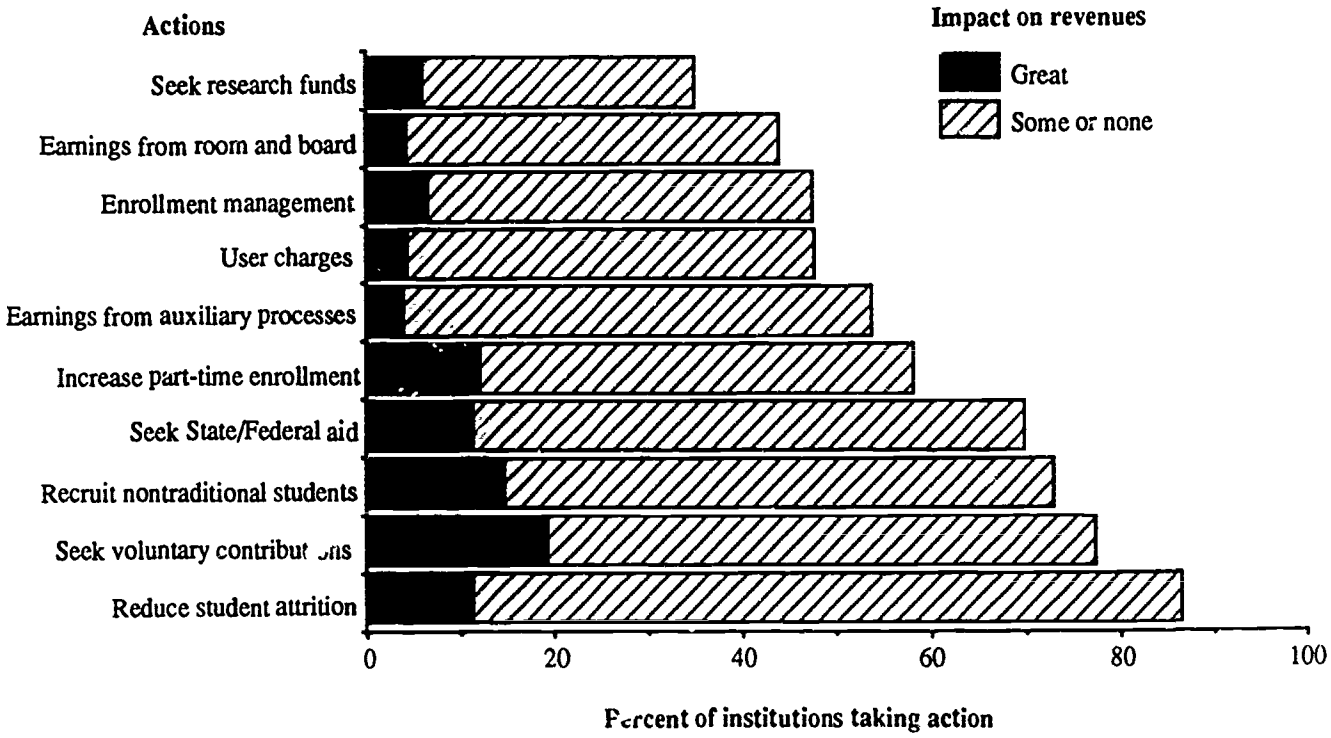


NOTE: Percentages may not add to 100 due to rounding.

SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (1989 survey).

Financial officials were asked to indicate from a list of 10 items (see Figure 5) which actions their institutions had taken that might affect revenues, and for those actions, whether they felt the actions had a *great* effect, *some* effect, or *no* effect.[6] The four actions most often selected by financial officials were *steps to reduce student attrition* (87 percent), *increasing efforts to obtain voluntary contributions* (78 percent), *recruiting nontraditional students* (73 percent), and *seeking more State or Federal aid* (70 percent; Appendix Table A-5). The actions financial officials were most likely to point to as having a *great* impact on revenues were *increasing efforts to obtain voluntary contributions* (25 percent), *increasing part-time enrollment* (21 percent), and *recruiting nontraditional students* (20 percent). Even though taking *steps to reduce student attrition* was the most common action, more financial officials reported a *great* impact from *increasing efforts to obtain voluntary contributions* (Figure 5).

Figure 5. The percentage of financial officials stating their institution took various actions in the 1980s and the impact of those actions on revenues: United States



SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (1989 survey).

[6]The questionnaire did not attempt to find institutions' reasons for taking the actions. Some actions were obviously directed towards increasing revenues (e.g., increased efforts to obtain voluntary contributions), while others may have had different motivations (e.g., acting to reduce student attrition).

In some cases, however, there were great variations among responses from financial officials of different types of institutions. For example, *increasing efforts to obtain research funds* was selected least frequently overall among the 10 actions listed, yet such efforts were an extremely common response of financial officials at doctorate-granting institutions (94 percent), and quite common among comprehensive institutions (72 percent; Appendix Table A-6). The low percentage of financial officials at baccalaureate institutions (34 percent) and two-year institutions (16 percent) citing this factor lowered the overall average.

Other substantial response differences occurred by institutional type, with doctorate-granting and two-year institutions often showing the greatest differences. Financial officials at doctorate-granting institutions were less likely to select *increase part-time enrollment* (25 percent) than those at two-year institutions (67 percent), and less likely than those at two-year institutions to select *recruit nontraditional students* (51 percent versus 78 percent). Financial officials at doctorate-granting institutions stated their institution often sought funds from other sources, such as *voluntary contributions* (99 percent, compared with 65 percent at two-year institutions), *user charges* (65 percent, versus 39 percent at baccalaureate institutions), and *research funds* (as noted above). Financial officials at two-year institutions were less likely to say their institution *sought increased earnings from room and board* (22 percent) than those at other types of institutions (e.g., ranging from 58 percent at doctorate-granting institutions to 71 percent at baccalaureate institutions).

Financial officials at public and private institutions again reported differences in the activities their institution took that might affect revenues. Financial officials at public institutions were more likely to say their institution *sought more State or Federal aid* (83 percent versus 55 percent at private institutions); their institutions were less likely to *seek increased earnings from room and board* (33 percent versus 58 percent at private institutions).

Financial officials at small institutions were less likely than those at large institutions to say their institution increased *efforts to obtain research funds* (19 percent versus 53 percent), and *acted to receive more State or Federal aid* (58 percent versus 77 percent).

One can compare financial officials' reports of their institution's likelihood of taking an action with their assessment of the impact of the actions on revenues. For example, financial officials at doctorate-granting institutions were less likely to say their institution *acted to increase nontraditional enrollment*. One reason may be that financial officials at doctorate-granting institutions did not see this action as having a *great* impact on their revenues (2 percent, compared with 28 percent at baccalaureate institutions; Appendix Table A-7). An action that was almost universally reported by financial officials at doctorate-granting institutions--*increasing efforts to obtain research funds*--was also seen by them to be likely to have a *great* impact on increasing revenues (42 percent, compared with 7 percent at baccalaureate institutions).

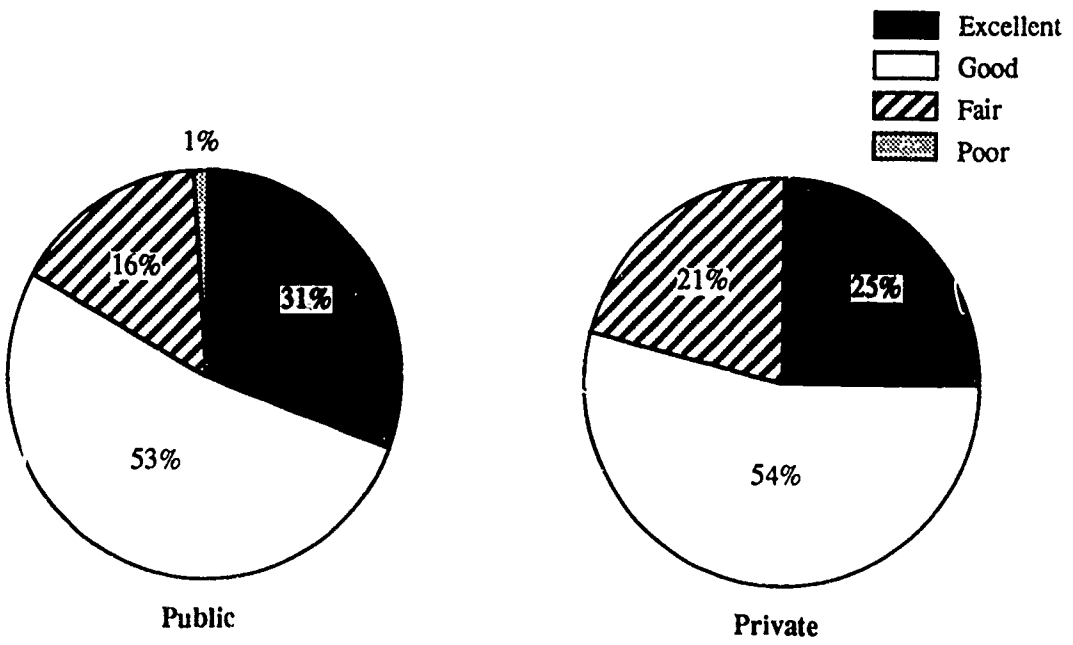
Finally, although the differences were not always statistically significant, financial officials at public institutions saw less impact on revenues than those at private institutions for every action listed. The differences were greatest for *recruiting nontraditional students* (12 percent for public institutions versus 31 percent for private institutions) and *increasing efforts to obtain voluntary contributions* (15 percent versus 35 percent). This may further explain why financial officials at private institutions were more satisfied with their institution's ability to obtain desired revenues, besides the fact that public institutions charge less for tuition.

Expenditures

Financial officials showed more satisfaction with their institution's ability to control expenditures than with its ability to obtain desired revenues. They generally viewed their institution's ability to control expenditures as either *excellent* (28 percent) or good (54 percent). Essentially no financial official said their institution's ability to control expenditures was *poor* (Appendix Table A-4).

In general, differences among financial officials concerning their institution's ability to control expenditures were relatively small and statistically insignificant. Even officials from public and private institutions gave roughly similar responses, unlike their responses concerning ability to raise revenues (Figure 6).

Figure 6. Financial officials' perceptions of their institution's ability to control expenditures: United States



NOTE: Percentages may not add to 100 due to rounding.

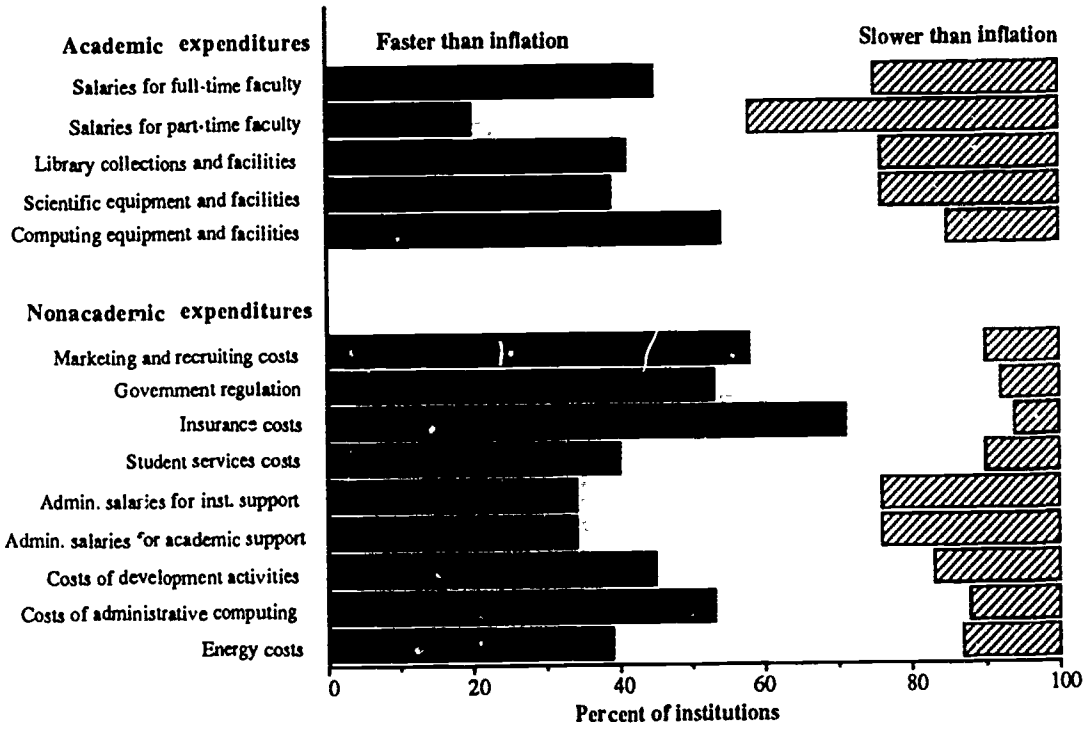
SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (1989 survey).

Expenditures in Relation to the Rate of Inflation

One way to examine expenditures is to compare expenditure increases to the rate of inflation. Financial officials were given a list of five types of academic expenditures and nine types of nonacademic expenditures, and asked whether each grew faster at their institution, at the same rate, or slower than the rate of inflation from 1980-81 to 1987-88. This provides an indication of the fastest growing expenditures, although not necessarily of the most important. Expenditures in an area may grow at a high percentage rate, but still account for few total dollars.

Five types of expenditures were stated by a majority of financial officials to have increased faster than inflation between 1980-81 and 1987-88 at their institution (Figure 7; Appendix Table A-8). These were *insurance costs* (71 percent), *marketing and recruiting costs* (58 percent), *computing equipment and facilities* (54 percent), *administrative computing* (53 percent), and the *costs of complying with government regulations* (53 percent). For all other types of expenditures except one, though there was no majority, more financial officials stated that increases outpaced inflation at their institution than stated they were slower than the rate of inflation. The only area where financial officials were more likely to state that increases were slower than inflation rather than faster than inflation was *average salaries for part-time faculty* (42 percent versus 20 percent).

Figure 7. Financial officials' estimations of changes in expenditures at higher education institutions (from 1980-81 to 1987-88) compared to inflation: United States



SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (1989 survey).

Of course, an expenditure may increase faster than inflation and yet be a relatively small portion of an institution's budget. Thus, financial officials were also asked to identify the two areas that contributed the most to increases in nonacademic expenditures at their institution. The expenditures reported most frequently among the top two were *insurance costs* (37 percent), *marketing and recruiting costs* (29 percent), and the *costs of administrative computing* (27 percent).

Financial officials at private institutions were more likely than those at public institutions to say their institution increased spending faster than the rate of inflation. In fact, for all 14 types of expenditures that financial officials were asked compare to inflation, the percentage at private institutions reporting increases faster than inflation was equal to or greater than the percentage at public institutions (Appendix Table A-9).[7] Some of the greatest differences were in the *costs of development activities* (62 percent versus 31 percent) and *marketing and recruiting costs* (74 percent versus 45 percent).

Financial officials at doctorate-granting and baccalaureate institutions were also particularly likely to say their institution increased spending faster than inflation. The percentage of officials at doctorate-granting institutions reporting their institution increased spending faster than inflation was at or above the rate reported for all institutions in every area but *administrative computing* and *energy costs*. Responses for baccalaureate institutions were at or above the overall rate for every type of expenditure but *library collections and facilities* and *energy costs*. In contrast, responses at two-year institutions were at or below the overall rate for every type of expenditure but *energy costs*.

Small institutions' financial officials generally were less likely than those at large institutions to say their institution increased spending faster than the rate of inflation, and their responses were at or below the overall rate reported for every area except *marketing and recruiting costs*, *development activities*, and *energy costs*. Financial officials in the West were at or below the overall rate in every area except the costs of complying with *government regulations* and *energy costs*, while officials located at institutions in the Northeast reported increases at or above the overall rate in every area.

Other Factors Affecting Expenditures

At times, major decisions or changes in the institutional environment may affect expenditures by requiring new or additional resources. Financial officials were given a list of factors and asked to describe their impact on expenditures in an attempt to identify other factors that might lead to spending increases at their institution. The factors listed were *change in the percentage of part-time students*, an *increase in the cost of remediation programs for entering students*, *change in total enrollment*, *change in the demographic composition of the student body*, *new construction or rehabilitation of facilities*, *increase in the number of faculty*, and *new or more costly academic programs*. For each item, financial officials were asked to either describe its impact on their institution's expenditures (as *great*, *some*,

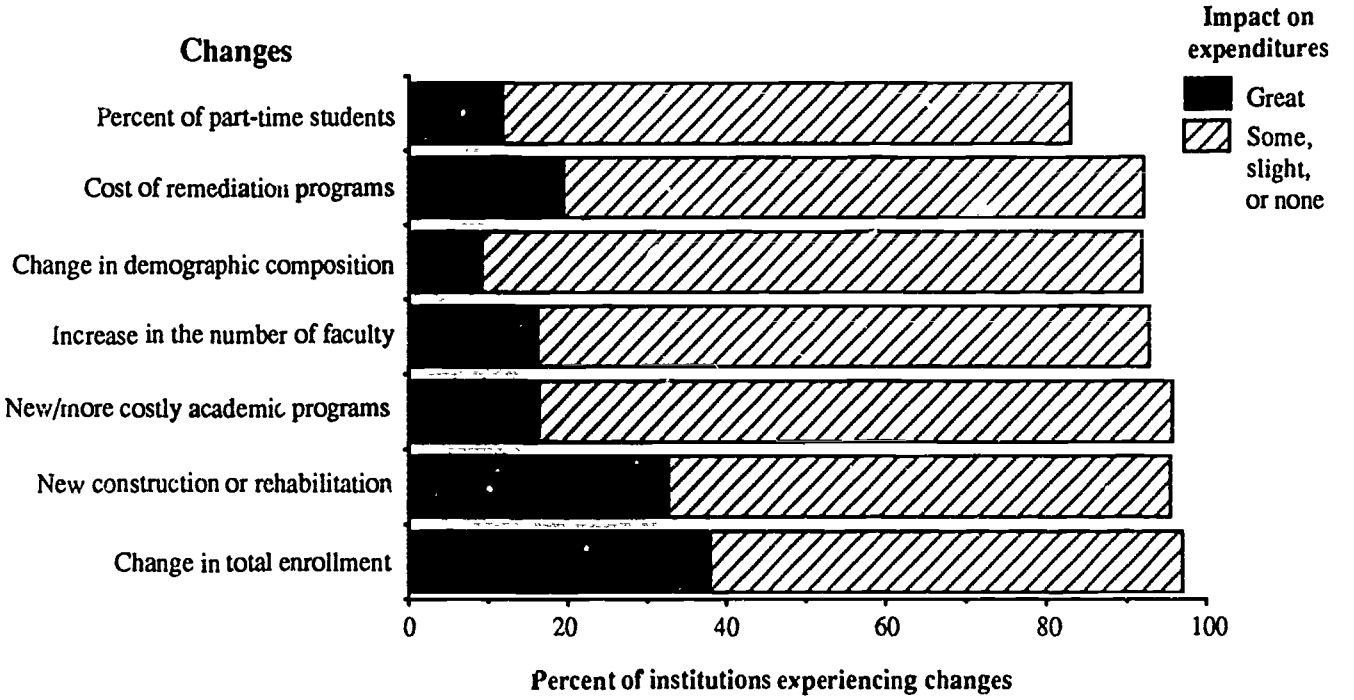
[7] Not all of these differences were statistically significant, however

slight, or *none*), or to state the factor was not applicable (i.e., it had not occurred over the period 1980-81 and 1987-88).

The overwhelming majority of financial officials indicated their institution had experienced changes in the areas listed. Each of the factors, with the exception of a *change in the percentage of part-time students*, was stated to have occurred in the institutions of over 90 percent of financial officials (Appendix Table A-10). In some cases, the changes may have been relatively minor, and this must be recognized in interpreting these results. However, the changes were sufficiently large that financial officials at 68 percent of all institutions listed at least one factor as having had a *great* impact on expenditures.

The factors selected by financial officials as being most likely to have had a *great* impact on expenditures at their institution were a *change in the total enrollment* (39 percent of those institutions experiencing a change), and *new construction or rehabilitation of facilities* (34 percent; Figure 8). These same factors were also the most likely to be listed among the two factors that were the most important (48 percent and 43 percent, respectively). The factor least often reported by financial officials as having an impact on expenditures was a *change in the demographic composition of the students*; only 10 percent indicated it had a *great* impact and 26 percent indicated it had no impact. However, other items which reflected changes in the size

Figure 8. The percentage of financial official stating their higher education institution experienced various changes between 1980-81 and 1987-88, and their assessment of the impact of those changes on expenditures: United States



SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (1989 survey).

and nature of the student body were mentioned as having *great* impact as frequently or more frequently (i.e., *change in the percentage of part-time students*, *increase in the cost of remediation programs for entering students*, and *change in total enrollment*). The response concerning demographic changes may have been lowered because respondents had indicated the impact of demographic changes in other ways.

Responses from financial officials at two-year institutions differed from those at other institutions when reporting which factors had a *great* impact on expenditures. They were much more likely to see a *great* impact from an *increase in the cost of remediation programs* (32 percent versus 0-11 percent at other institutions), from a *change in the demographic composition of the student body* (15 percent versus 3 percent at doctorate-granting institutions), and from a *change in the percentage of part-time students* (19 percent versus 0-6 percent at doctorate-granting and comprehensive institutions; Appendix Table A-11). However, they were less likely to see a *great* impact from *new construction or rehabilitation of facilities* (24 percent versus 44-46 percent at baccalaureate and doctorate-granting institutions).

Other differences in response also occurred among the financial officials. Those at public institutions were more likely than those at private institutions to see a *great* impact from *remediation programs* (32 percent versus 7 percent). Financial officials at institutions in the Northeast were more likely to see a *great* impact from the *new construction or rehabilitation of facilities* (53 percent) than those at institutions in the Central region (24 percent) or the West (26 percent).

Renovation of Facilities

As noted earlier, changes in facilities were seen by financial officials to be one of the major factors having a *great* impact on increases in expenditures. Another part of the questionnaire requested information on some of the areas where major renovation or expansion of facilities was most likely to have occurred.

Renovation or expansion of facilities was indicated by 72 percent of the financial officials to have occurred at their institution for *computing facilities*, by 48 percent for *academic and research facilities*, and by 33 percent for *library facilities* (Appendix Table A-12). *Academic and research facilities* were most often renovated or expanded at doctorate-granting institutions (91 percent versus 43-54 percent), and at large institutions (58 percent versus 33 percent for small institutions).

Actions that Might Control Costs

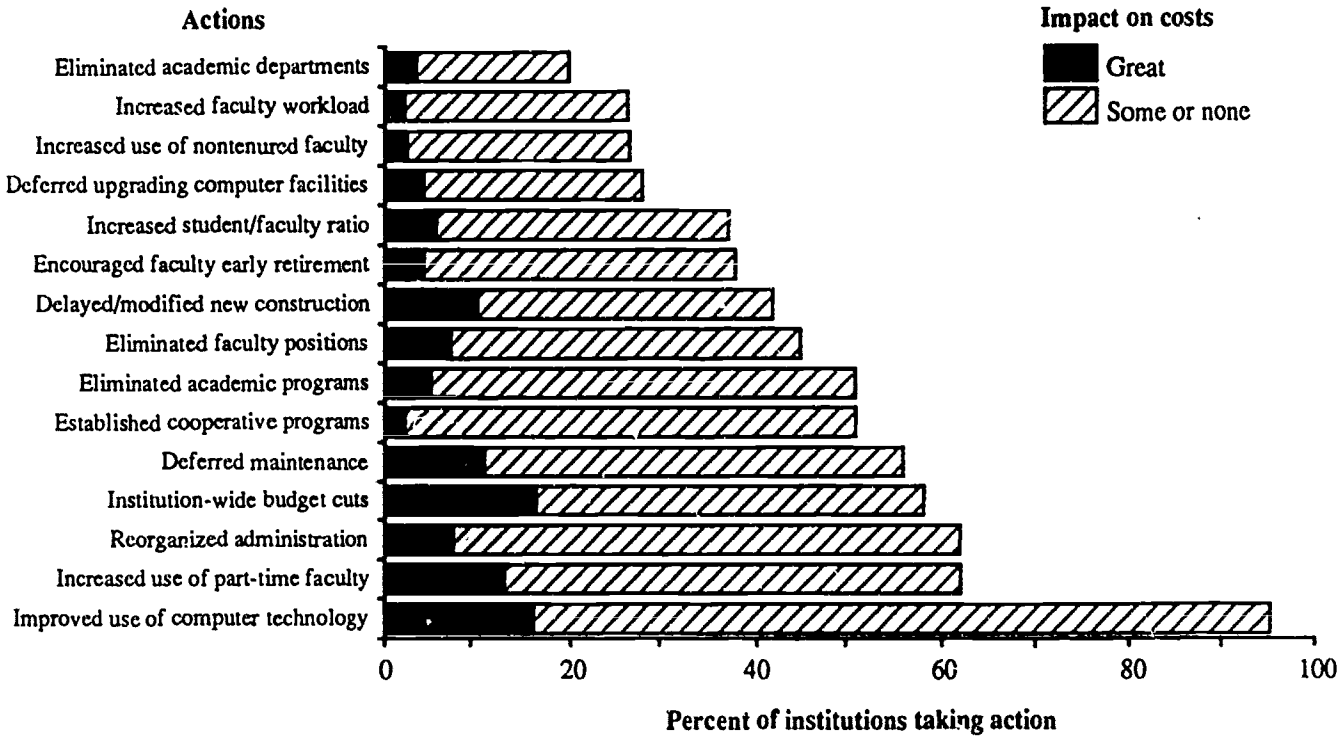
Institutions may have taken a variety of additional actions that have the potential to control costs. In some cases, controlling costs may be assumed to have been the primary intention (such as *deferred maintenance of facilities*), while in other cases any effects on costs may have been incidental to other goals (as in the *elimination of academic programs* or *reorganization of departments*). Since the result may be reduced costs regardless of the stated intention, the questionnaire asked financial officials to assess 15 potential cost-cutting actions whether or not controlling costs was an explicit goal. For each action, they were asked to indicate whether their institution had done the action in the 1980s, and if so, whether they felt the

impact of the action on controlling costs at their institution was *great*, *some*, or *none*.

Seven potential cost controlling actions were reported taken at the institutions of a majority of the financial officials: *improving computer use* (95 percent), *increasing the use of part-time faculty* (62 percent), *reorganizing the administration* (62 percent), *implementing institution-wide budget cuts* (58 percent), *deferring maintenance of facilities* (56 percent), *eliminating academic programs* (51 percent), and *establishing cooperative programs with other institutions* (51 percent; Appendix Table A-13). Even the least frequently cited of the 15 items, *eliminating academic departments*, was cited by 20 percent of the financial officials as having occurred at institutions, revealing that institutions have taken a wide variety of actions that have the potential to reduce costs.

These actions were not necessarily taken in order to affect costs, and whatever their intentions, may not have had a significant impact on costs. Most commonly, financial officials described the actions as having *some* impact on costs (55-87 percent, depending on the action taken), rather than a *great* impact (4-28 percent) or *no* impact (. 41 percent; Appendix Table 13 and Figure 9). The actions most often cited as having a *great* impact

Figure 9. The percentage of financial officials stating their institution had taken various actions in the 1980s and their assessment of the impact of each action on costs: United States



SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (1989 survey).

were *implementing institution-wide budget cuts* (28 percent), *delaying new construction* (24 percent), and *increasing the use of part-time faculty* (21 percent). Some of the items most likely to show *no* effect on costs were *establishing cooperative programs* (41 percent), *reorganizing the administration* (25 percent), and *improving the use of computer technology* (24 percent). These latter items are actions that may often be taken for reasons other than controlling costs.

The likelihood of taking these actions varied among institutions, according to the reports of financial officials. Those at public institutions were more likely than those at private institutions to say their institution took actions to *encourage early retirement* (46 percent versus 30 percent; Appendix Table A-14). Financial officials at small institutions were less likely than those at large institutions to report that their institution *encouraged early retirement* (14 percent versus 61 percent), but more likely see it *increase faculty workload* (49 percent versus 21 percent) and *eliminate faculty positions* (56 percent versus 38 percent). Those at doctorate-granting institutions were more likely than those at two-year or baccalaureate institutions to say their institution *encouraged early retirement* (73 percent versus 32 and 34 percent, respectively).

Financial officials further appeared to differ in their evaluation of the impact of these actions. However, because these actions were not taken by all institutions, the number of financial officials reporting on the impact of the actions was sometimes too small to produce statistically meaningful results. For example, 38 percent of financial officials at institutions in the Southeast reported a *great* impact from *delaying new construction*, as compared with 12 percent of institutions in the Northeast (Appendix Table A-15); yet with only 42 percent of all financial officials reporting their institution taking this action, the difference was not statistically significant.

Management Initiatives by Higher Education Institutions

Finally, a crucial component of a higher education institution's financial condition is the management of the institution. Management initiatives can affect either the revenues or expenditures of an institution, but may be best described as attempts to optimize the use and development of an institution's resources. In the questionnaire, financial officials were asked to indicate the use and effectiveness of five management initiatives: *using an outside consultant to evaluate the school's management system*, *improving the budgeting process*, *developing a long-range strategic plan*, *implementing or modifying a management information system*, and *using external budget reviews*.

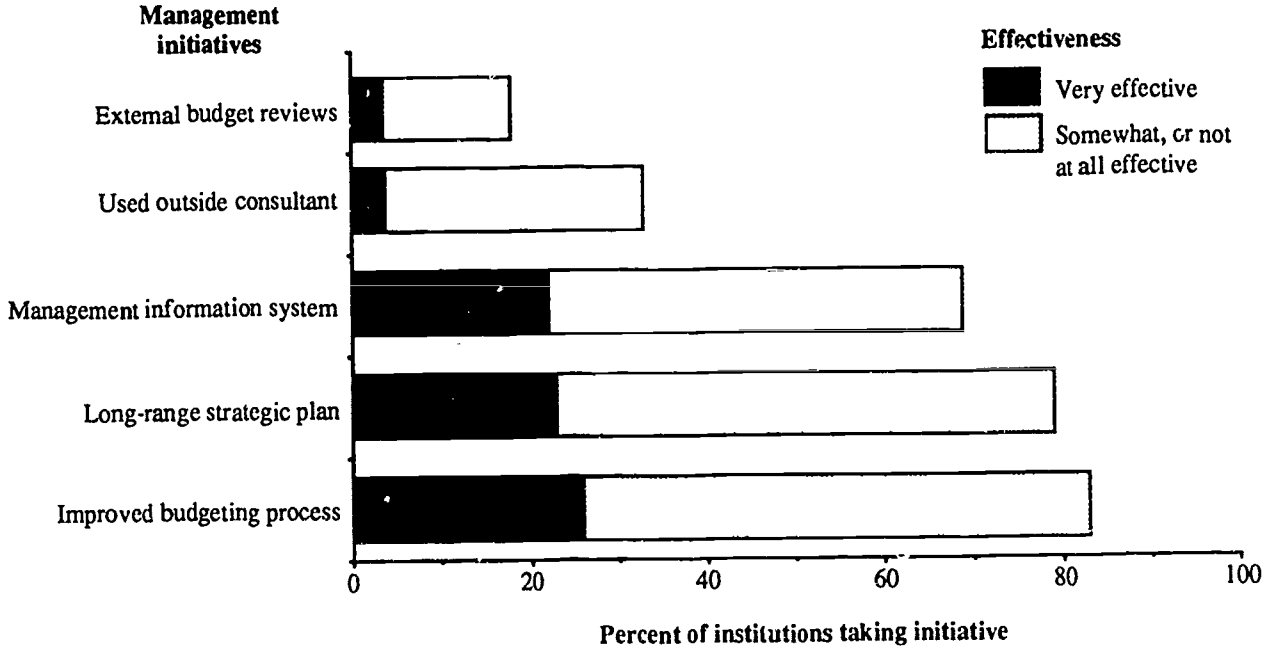
Three of these initiatives were reported used by institutions of a majority of financial officials. The initiatives indicated were *improving the budgeting process* (82 percent), *developing a strategic plan* (78 percent), and *implementing or modifying a management information system* (68 percent; Appendix Table A-16). The other actions were reported to be taken much less frequently. According to financial officials, *outside consultants* were used by 33 percent of the institutions, and *external budget reviews* by 18 percent.

The same three initiatives selected frequently were also the ones most likely to be described by financial officials at institutions using them as being *very* effective (Figure 10). Roughly one-third of financial officials at institutions taking these initiatives said they were *very* effective, and two-thirds described them as *somewhat* effective.

One initiative, *improving the budgeting process*, was selected not only widely but also relatively uniformly among financial officials across all categories of institutions. Other initiatives showed more variation among financial officials at different institutions, however. The use of *outside consultants* was indicated more by financial officials at private institutions (42 percent) than those at public institutions (26 percent; Appendix Table A-17).

Financial officials at institutions that took these initiatives also varied in their views of the actions' effectiveness. Those at private institutions were more likely to consider *strategic planning* to be very effective than those at public institutions (39 percent versus 20 percent).

Figure 10. The percentage of financial officials stating their higher education institution had taken various management initiatives in the 1980s and their evaluation of the effectiveness of those initiatives: United States



SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (1989 survey).

Factors Related to Tuition Levels

In this section, revenues, expenditures, and institutional policies will be related more directly to their specific effect on tuition.

The Authority to Adjust Tuition Levels

Not all institutions are allowed to set their own tuition levels; in fact, 33 percent of the financial officials indicated that their institution had *no* authority to set tuition levels, while 12 percent said their institution may adjust tuition levels *only by a small amount* (Appendix Table A-18). Primarily, this factor distinguished public institutions from private institutions: 93 percent of financial officials at private institutions stated their institution had full authority to adjust tuition levels, compared with only 22 percent of those at public institutions.

The inability to set tuition levels was related to the tuition charged. Too few private institutions have limited authority to adjust tuition levels to make meaningful comparisons. However, among public institutions, institutions with full authority to set tuition levels charged a mean of $1,400 per year, while those with limited or no authority charged a mean of $900.

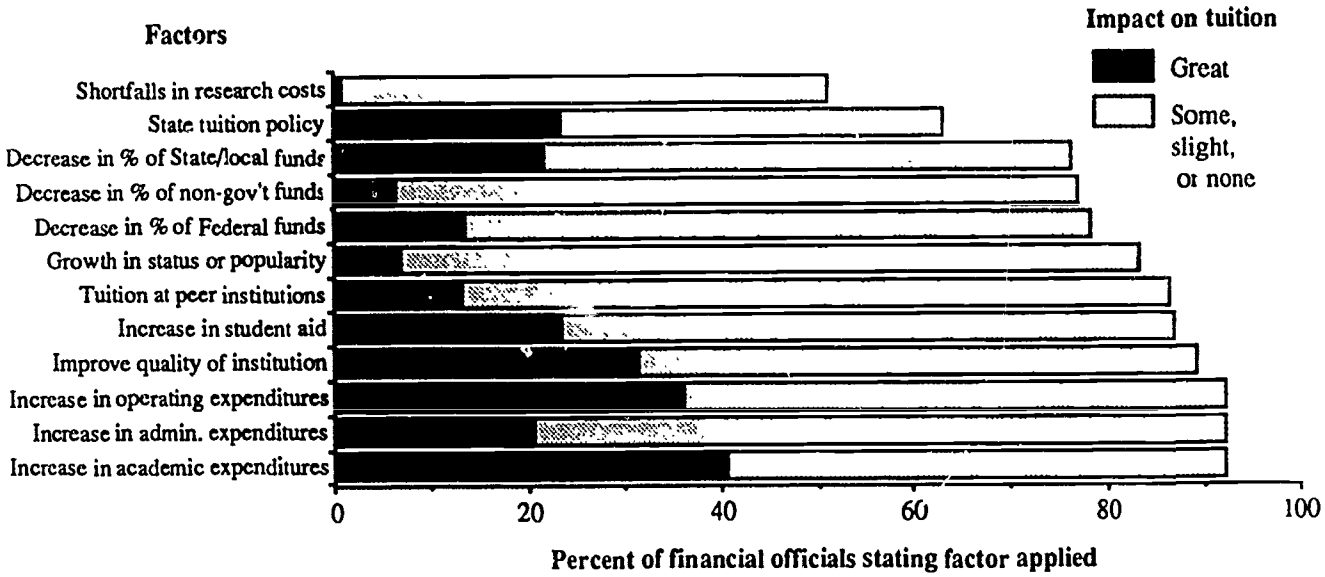
The Impact of Various Factors on Tuition Increases

Financial officials were given a list of 12 factors that might be associated with tuition increases. They were asked to indicate whether each of the factors had occurred and, if so, whether they felt the impact on tuition increases was *great*, *some*, *slight*, or *none* at their institution. Financial officials at institutions that lacked authority to set tuition levels were asked to describe the importance of the factors for those who made the tuition decisions.

Overwhelmingly, respondents said these factors applied to their institution. For 10 of the 12 factors, at least 75 percent of the institutions said the factors applied, while the remaining 2 factors applied to a majority of institutions (Figure 11; Appendix Table A-19). The two factors occurring least often were *State tuition policy requirements* (63 percent), which are relevant primarily for public institutions, and *making up for shortfalls in research costs* (51 percent), which are relevant only for institutions that both place importance on research and that have experienced shortfalls. Most frequently (all at 92 percent), financial officials reported *increases in academic*, *administrative*, and *operating expenditures* as affecting tuition.

The factors that financial officials picked most often as having a *great* effect on tuition increases at their institution were an *increase in academic expenditures* (44 percent), an *increase in operating expenditures* (39 percent), *State tuition policy requirements* (37 percent), and a *desire to improve the quality of the institution* (35 percent; Appendix Table A-19).

Figure 11. The percentage of financial officials reporting the incidence and impact of factors that might affect tuition increases at their higher education institution: United States



SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (1989 survey).

Factors picked by a majority of financial officials as having *no* effect or only a *slight* effect on tuition at their institution were *making up for shortfalls in research costs* (91 percent), *growth in the status or popularity of the institution* (63 percent), a *decrease in the proportion of nongovernment funding* (74 percent), and a *decrease in the proportion of Federal funding* (54 percent).

Financial officials also were asked to pick the two most important factors affecting tuition increases at their institution. Consistent with the results above, the most mentioned items were an *increase in academic expenditures* (43 percent) and an *increase in operating expenditures* (36 percent); no other item was mentioned as one of the top two by more than 23 percent of financial officials.

As might be expected from the differences noted earlier, the responses of financial officials at private institutions differed considerably from those at public institutions in the importance they placed on these factors. The two factors mentioned most frequently by financial officials at public institutions as having a *great* impact--*State tuition policy requirements* (50 percent) and a *decrease in the proportion of State/local funding* (43 percent)--were almost never mentioned by those at private institutions (0 percent and 9, percent respectively; Appendix Table A-20). Further, some factors frequently mentioned by financial officials at private institutions as having a *great* impact were mentioned significantly less often by those at public institutions. These factors were an *increase in operating expenditures* (53 percent versus 26 percent), an *increase in institutional student aid* (47 percent versus 4 percent), and a *decrease in the proportion of Federal funding* (29 percent versus 5 percent).

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Financial officials at institutions that primarily emphasize general undergraduate baccalaureate-level education, which are typically private, also responded differently from those at other institutions. They were more likely to see a *great* impact on tuition from an *increase in operating expenditures* (55 percent versus 26 percent at doctorate-granting and 33 percent at comprehensive and two-year institutions), a *decrease in the proportion of Federal funding* (33 percent versus a range of 7 percent at doctorate-granting to 12 percent at comprehensive institutions), and an *increase in institutional student aid* (53 percent versus a range of 9 percent at two-year to 32 percent at comprehensive institutions). They were less likely to report a *great* impact from a *decrease in the proportion of State/local funding* (17 percent versus 34 percent at doctorate-granting institutions), and from *State tuition policy requirements* (19 percent versus 39 and 49 percent at two-year and comprehensive institutions, respectively). Financial officials at two-year institutions, which are often public and have relatively low tuitions, were much less likely than those at other institutions to see a *great* impact on tuition from an *increase in institutional student aid* (9 percent versus a range of 23 percent at doctorate-granting to 53 percent at baccalaureate institutions).

Respondents at small institutions were more likely than those at large institutions to see a *great* impact from an *increase in operating expenditures* (53 percent versus 33 percent), and less likely to see a *great* impact from a *decrease in the proportion of State/local funding* (11 percent versus 42 percent).

The Effect of Tuition Increases on Enrollment

One potential constraint on higher education institutions in increasing tuition levels is the fear that fewer students will apply or accept admission into the institution. To some degree, institutions may offer student aid to reduce the costs for those students whose tuition levels are highly important, but this option is not available if students choose not to apply.

However, when asked about the effect of a 5 percent increase in tuition for this year over and above any increase actually implemented, most financial officials (67 percent) estimated that the number of applications would *change by less than 2 percent* (Appendix Table A-21). Almost all of the remaining financial officials (i.e., 24 percent of all institutions) estimated there would be a *decrease in applications of 2 to 10 percent*.

The financial officials that were most likely to predict a decrease in applications were those at baccalaureate institutions (39 percent versus 14 percent at doctorate-granting and 22 percent at two-year institutions), private institutions (36 percent versus 17 percent at public institutions), and small institutions (39 percent versus 15 percent at large institutions).

Two opposing hypotheses are that tuition increases would most likely result in decreased applications in institutions that are already the most expensive or that a tuition increase would most affect the relatively inexpensive institutions. (The first might occur because a 5 percent increase of a larger base is a larger dollar increase, and because students might be more likely to be near the maximum tuition they can afford. Inexpensive institutions might experience a decline because they might be serving a cost conscious clientele.) Among those financial officials at institutions with tuitions above $5,000, 42 percent predicted a decrease of at least 2 percent in applications, while only 19 percent of those at institutions with tuitions less than $5,000 predicted a decrease of at least 2 percent (special analysis, not in tables). Thus, tuition increases appear to have the greatest effect on applications at the more expensive institutions.

Summary

Revenues

Financial officials were generally satisfied with their institution's ability to raise needed revenues. Half rated their institution's ability to obtain revenues as either *excellent* or *good*. From a list of 10 potential actions that might affect revenues, *increased efforts to obtain voluntary contributions* and *recruiting nontraditional students* were the ones selected by financial officials as most likely to be taken at their institution and to have had a *great* impact on revenues.

Expenditures

Financial officials were very satisfied with their institution's ability to control expenditures--more so than its ability to obtain revenues. Over four-fifths rated their institution's ability to control expenditures as either *excellent* or *good*.

Between 1980-81 and 1987-88, the following five expenditures rose faster than inflation at institutions according to a majority of financial officials:

- *Insurance costs* (71 percent),
- *Marketing and recruiting costs* (58 percent),
- *Computing equipment and facilities* (54 percent),
- *Administrative computing* (53 percent), and the
- *Cost of complying with government regulations* (53 percent).

Of these, *insurance costs* (37 percent), *marketing and recruiting costs* (29 percent), and the *costs of administrative computing* (27 percent) were most often cited as having the largest effect on increasing nonacademic expenditures. Financial officials at private, doctorate-granting and baccalaureate, large, and Northeastern institutions were most likely to say their institution increased expenditures faster than inflation. *Salaries for part-time faculty* was the only expenditure category where more financial officials stated that increases were slower than inflation (42 percent) than that increases were faster than inflation (20 percent).

Among nonfinancial actions affecting expenditures, a *change in total enrollment* and new *construction or rehabilitation of facilities* were most often cited (48 and 43 percent, respectively) as having the largest impact on expenditures. Between 1980-81 and 1987-88, renovation or expansion was cited by financial officials as being conducted by 72 percent of the institutions with respect to *computing facilities*, by 48 percent regarding *academic and research facilities*, and by 33 percent regarding *library facilities*.

Actions to Control Costs or Improve Management

Of 15 actions that have the potential to help control costs, whether or not they were done for that reason, the actions selected most often by financial officials as having a *great* impact were *implementing institution-wide budget cuts* (28 percent), *delaying or modifying new construction* (24 percent), or *increasing the use of part-time faculty* (21 percent). Each of these actions

was stated as being taken by between 42 and 62 percent of institutions. *Establishing cooperative programs* and *reorganizing the administration* were the actions most likely to show no effect on costs (41 and 25 percent, respectively).

Three initiatives--*improving the budgeting process* (82 percent), *developing a strategic plan* (78 percent), and *implementing or modifying a management information system* (68 percent)--were reported taken by a large percentage of financial officials, with roughly one-third of the financial officers reporting the initiatives were *very* effective and two-thirds that they were *somewhat* effective. The use of *outside consultants* (33 percent) or *external budget reviews* (18 percent) were much less likely to be implemented.

Factors Related to Tuition

The questionnaire contained a list of 12 factors related to tuition and fee increases, and space for financial officials to indicate that the factor did not apply or state its impact (i.e., great, some, slight, none) on tuition at their institution. With the exception of *making up for shortfalls in research costs* and *State tuition policy requirements*, all factors were reported by at least three-quarters of the financial officials as having occurred at their institution. The following factors were most often listed as having a *great* effect on tuition increases:

- An *increase in academic expenditures* (44 percent),
- An *increase in operating expenditures* (39 percent),
- *State tuition policy requirements* (37 percent), and a
- *Desire to improve the quality of the institution* (35 percent).

Financial officials at public and private institutions differed significantly in the importance placed on these factors. Those at public institution saw the greatest impact coming from *State tuition policy requirements* and a *decrease in the proportion of State/local funding*, factors rarely listed by those at private institutions. An *increase in operating expenditures*, an *increase in institutional student aid*, and a *decrease in the proportion of Federal funding* were often selected by financial officials at private institutions as having a *great* impact on tuition but rarely were selected by those at public institutions.

Financial officials felt that increases in tuitions would have little effect on the number of students applying for admission to their institution. Two-thirds of financial officials said that a 5 percent increase in tuition over and above any increase actually implemented would lead to *less than a 2 percent change* in enrollment this year. Those at institutions with tuition above $5,000 were more likely to expect an enrollment decline of greater than 2 percent (42 percent) than were those at less expensive institutions (19 percent).

Appendix A

Detailed Tables

LIST OF TABLES

Table A-1. Mean "typical" tuition and required fees per institution in 1988-89 by institutional characteristic: United States

Institutional characteristic	Undergraduate			Graduate		
	Public		Private	Public		Private
	In-state	Out-of-state		In-state	Out-of-state	
Total	$1,000	$2,900	$6,600	$1,600	$3,900	$5,200
Type						
Doctoral	1,800	5,100	10,600	2,100	5,400	10,100
Comprehensive	1,400	3,500	7,200	1,500	3,500	4,800
Baccalaureate	--	--	6,900	--	--	--
Two-year	800	2,400	5,300	--	--	--
Enrollment size						
Less than 1,000	700	2,000	5,700	--	--	--
1,000-4,999	1,000	2,600	7,200	--	--	4,800
5,000 or more	1,000	3,300	9,200	1,700	4,200	7,800
Region						
Northeast	1,600	3,400	7,500	2,100	3,800	7,000
Central	1,400	3,300	6,800	2,000	4,500	--
Southeast	900	2,600	5,200	1,400	3,400	--
West	600	2,700	6,700	1,300	4,000	--

-- Too few cases for a reliable estimate.

NOTE. Financial officials were asked to provide the typical tuition and required fees for a full-time student for the full academic year. Room and board charges were not included. Figures have been rounded to the nearest $100.

SOURCE Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Table A-2. Median percentage of tuition increase from 1980-81 to 1988-89 by institutional characteristic: United States

Institutional characteristic	Undergraduate			Graduate		
	Public		Private	Public		Private
	In-state	Out-of-state		In-state	Out-of-state	
Total	108	88	107	97	113	91
Type						
Doctoral	104	116	120	108	121	119
Comprehensive	82	103	111	80	105	90
Baccalaureate	--	--	113	--	--	--
Two-year	121	75	86	--	--	--
Enrollment size						
Less than 1,000	109	125	98	--	--	--
1,000-4,999	104	83	113	--	--	90
5,000 or more	110	92	116	100	116	111
Region						
Northeast	84	85	108	77	120	110
Central	89	88	104	110	113	--
Southeast	97	104	107	101	127	--
West	155	76	111	97	96	--

-- Too few cases for a reliable estimate.

NOTE. Data were obtained for 1980-81 from the U.S. Department of Education's Higher Education General Information Surveys (HEGIS) data file. This, along with 1988-89 data from the survey, allowed median percentage increases to be calculated.

SOURCE. Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Table A-3. Mean typical room and board charges at higher education institutions by institutional characteristic: United States

Institutional characteristic	1988-89				1989-90			
	Room		Board		Room		Board	
	Public	Private	Public	Private	Public	Private	Public	Private
Total	$1,150	$1,550	$1,200	$1,550	$1,200	$1,650	$1,200	$1,650
Type								
Doctoral	1,550	2,250	1,450	2,000	1,650	2,350	1,550	2,100
Comprehensive	1,300	1,900	1,150	1,600	1,350	2,000	1,200	1,700
Baccalaureate	1,100	1,350	1,100	1,550	1,150	1,450	1,150	1,600
Two-year	850	1,500	1,100	1,450	850	1,650	1,150	1,600
Enrollment size								
Less than 1,000	900	1,350	1,150	1,450	900	1,450	1,150	1,550
1,000 - 4,999	950	1,600	1,100	1,600	1,000	1,700	1,150	1,700
5,000 or more	1,350	2,050	1,250	1,800	1,400	2,150	1,350	1,850
Region								
Northeast	1,700	2,000	1,350	1,650	1,750	2,150	1,400	1,750
Central	1,050	1,200	950	1,450	1,100	1,300	1,000	1,550
Southeast	1,050	1,400	1,150	1,550	1,100	1,500	1,200	1,650
West	1,000	1,400	1,250	1,600	1,050	1,500	1,250	1,650

NOTE: Financial officials were asked to provide the typical room and board charges for the full academic year. Charges have been rounded to the nearest $50.

SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Table A-4. Financial officials' percention of their institution's ability to obtain desired revenues and control expenditures, by institutional characteristic: United States

Institutional characteristic	Institution's ability to obtain desired revenues				Institution's ability to control expenditures			
	Excellent	Good	Fair	Poor	Excellent	Good	Fair	Poor
	(percentage)							
Total	11	41	39	9	28	54	18	0
Type								
Doctoral	16	41	33	10	24	60	16	0
Comprehensive	7	45	37	11	25	57	17	1
Baccalaureate	16	43	36	5	28	51	21	0
Two-year	9	39	42	10	30	53	17	0
Control								
Public	9	32	46	13	31	53	16	1
Private	14	52	30	5	25	54	21	0
Enrollment size								
Less than 1,000	7	41	44	7	19	52	29	0
1,000-4,999	13	45	34	7	33	53	14	0
5,000 or more	11	35	42	13	29	55	15	1
Region								
Northeast	8	64	25	3	28	54	18	0
Central	5	36	48	11	28	50	22	1
Southeast	20	36	34	10	33	51	15	0
West	11	30	48	11	23	59	16	1

NOTE: Percentages may not add to 100 due to rounding.

SOURCE. Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U S. Department of Education, 1990 (survey conducted in 1989).

Table A-5. Percentage of financial officials stating their institution took various actions in the 1980s that might affect revenues and their evaluation of the impact of the actions on revenues: United States

Type of action	Took action	Impact of action		
		Great	Some	None
Steps to reduce student attrition	87	13	77	10
Increased part-time enrollment	58	21	72	8
Recruit nontraditional students	73	20	66	14
Implement enrollment management	48	14	74	12
Fee charges for users	48	9	85	6
Efforts for research funds	35	17	66	17
Efforts for voluntary contributions	78	25	70	5
Sought more State/Federal aid	70	16	72	12
Earnings from auxiliary processes	54	7	88	5
Earnings from room and board	45	10	84	5

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Table A-6. Percentage of financial officials stating their institution took actions in the 1980s that might increase revenues, by institutional characteristic: United States

Institutional characteristic	Action taken in 1980s									
	Reduce student attrition	Increase part-time enrollment	Recruit non-traditional students	Enrollment management	User charges	Seek research funds	Seek voluntary contributions	Seek State/ Federal aid	Earnings from auxiliary processes	Earnings from room and board
Total	87	58	73	48	48	35	78	70	54	45
Type										
Doctoral	78	25	51	59	65	94	99	79	60	58
Comprehensive	88	55	67	56	49	72	94	70	60	65
Baccalaureate	87	51	74	48	39	34	87	56	63	71
Two-year	88	67	78	44	51	16	65	76	46	22
Control										
Public	85	62	77	46	53	41	75	83	50	33
Private	89	53	69	50	43	28	81	55	58	58
Enrollment size										
Less than 1,000	91	51	67	51	57	19	66	58	52	45
1,000 - 4,999	84	68	75	41	40	31	83	71	57	53
5,000 or more	88	49	75	55	54	53	80	77	51	32
Region										
Northeast	89	60	79	54	48	43	84	68	60	47
Central	78	65	69	53	49	27	84	69	48	34
Southeast	93	55	70	40	40	33	75	65	61	56
West	88	52	75	45	57	37	70	77	47	40

SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Table A-7. Percentage of financial officials reporting actions taken by their institution in the 1980s had great impact on increasing revenues, by institutional characteristic: United States

Institutional characteristic	Action taken in 1980s									
	Reduce student attrition	Increase part-time enrollment	Recruit non-traditional students	Enrollment management	User charges	Seek research funds	Seek voluntary contributions	Seek State/ Federal aid	Earnings from auxiliary processes	Earnings from room and board
Total	13	21	20	14	9	17	25	16	7	10
Type										
Doctoral	6	–	2	13	8	42	34	16	6	11
Comprehensive	11	10	17	11	9	9	23	17	8	16
Baccalaureate	14	28	28	17	15	7	30	19	11	13
Two-year	14	21	18	13	8	–	20	15	3	–
Control										
Public	9	16	12	9	8	14	15	13	4	3
Private	18	27	31	18	11	22	35	22	10	15
Enrollment size										
Less than 1,000	22	23	36	19	15	–	34	21	10	9
1,000 - 4,999	9	26	21	13	5	5	26	19	4	12
5,000 or more	11	8	7	11	10	21	18	9	10	8
Region										
Northeast	20	17	22	12	11	12	22	15	11	18
Central	19	28	24	17	11	25	24	11	6	19
Southeast	4	16	18	8	8	16	29	26	4	3
West	11	22	16	17	8	17	25	12	8	4

– Too few cases for a reliable estimate.

SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Table A-8. Financial officials' comparison of the rate of expenditure increases from 1980-81 to 1987-88 at their institution with the rate of inflation, and the number listing various types of expenditures among the two most important factors in increases in nonacademic expenditures, by type of expenditure: United States

Type of expenditure	Comparison to inflation			Among top two
	Faster	Same rate	Slower	
	(percentage)			
Academic expenditures				
Average salaries and benefits for full-time faculty	45	30	25	--
Average salaries and benefits for part-time faculty	20	38	42	--
The costs of library collections and facilities	41	35	24	--
The costs of scientific equipment and facilities	39	37	24	--
The costs of computing equipment and facilities	54	31	15	--
Nonacademic expenditures				
Marketing and recruiting costs	58	32	10	29
Costs of complying with government regulations	53	39	8	17
Insurance costs	71	23	6	37
Student services costs	40	50	10	17
Administrative salaries for institutional support	34	42	24	21
Administrative salaries for academic support	34	42	23	15
Costs of development activities	45	38	17	13
Costs of administrative computing	53	35	12	27
Energy costs	39	48	13	24

-- Not applicable.

NOTE: Institutions were instructed to consider expenditure increases as greater than the rate of inflation if the increases were more than 45 percent between 1980-81 and 1987-88, and as slower than the rate of inflation if the increases were less than 35 percent. Percentages may not add to 100 due to rounding.

SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Table A-9. Percentage of financial officials reporting their institution had expenditure increases greater than inflation over the period of 1980-81 to 1987-88, by institutional characteristic: United States

Institutional characteristic	Expenditure increases greater than inflation													
	Salaries for full-time faculty	Salaries for part-time faculty	Library collections and facilities	Scientific equipment and facilities	Computing equipment and facilities	Marketing	Government regulations	Insurance costs	Student services	Administrative salaries for institution support	Administrative salaries for academic support	Costs of development activities	Administrative computing	Energy costs
Total	45	20	41	39	54	58	53	71	40	34	3[illegible]	45	53	39
Type														
Doctoral	59	38	68	67	62	59	71	81	45	45	49	60	48	37
Comprehensive	44	21	53	44	51	52	51	65	37	30	32	55	61	35
Baccalaureate	53	23	40	41	60	66	53	78	45	39	40	60	62	36
Two-year	39	15	35	33	51	56	50	68	38	31	30	33	46	41
Control														
Public	41	16	41	38	51	45	49	64	35	28	2[illegible]	31	51	39
Private	49	24	42	41	58	74	57	79	46	41	41	62	55	39
Enrollment size														
Less than 1,000	26	19	26	26	39	64	43	68	39	33	27	50	33	42
1,000 - 4,999	53	20	45	44	62	62	58	74	41	36	37	49	59	40
5,000 or more	47	21	48	44	56	48	53	69	40	33	35	37	60	35
Region														
Northeast	62	28	50	55	62	68	57	76	46	47	44	53	63	41
Central	47	20	45	39	52	69	64	83	45	35	33	58	61	31
Southeast	41	16	38	33	50	51	35	64	34	33	36	41	40	27
West	30	16	33	33	53	46	56	64	36	22	24	31	49	56

NOTE: Expenditure increases were considered greater than the rate of inflation if the increases between 1980-81 and 1987-88 were greater than 40 percent.

SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Table A-10. Percentage of financial officials reporting their institution experienced various types of changes, their assessment of the impact of the changes on increases in expenditures at their institution between 1980-81 and 1987-88, and the number that listed changes among the two most important, by type of change: United States

Type of change	Experienced change*	Impact of change				Top two factors
		Great	Some	Slight	None	
Change in the percentage of part-time students	83	14	33	30	23	14
Increase in the cost of remediation programs	92	21	43	24	12	26
Change in total enrollment	97	39	39	15	6	48
Change in demographic composition of the students	92	10	31	33	26	5
New construction or rehabilitation of facilities	96	34	39	18	9	43
Increase in the number of faculty	93	17	45	21	16	20
New or more costly academic programs	96	17	50	23	10	31

*This column lists the percentage of institutions that gave a response concerning the level of impact, rather than marking the change as not applicable. Some institutions may have chosen to answer "no impact" rather than mark "not applicable" when they had not experienced one of the changes listed. Percentages may not add to 100 due to rounding.

SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Table A-11. Percentage of financial officials stating that various changes had "great" or "some impact" on increases in expenditures at their institution between 1980-81 and 1987-88, by institutional characteristic: United States

Institutional characteristic	Percent of part-time students		Cost of remediation programs		Total enrollment		Demographic composition		New construction or rehabilitation		Increase in faculty		Academic programs	
	Great	Some	Great	Some	Great	Some	Great	Some	Great	Some	Great	Some	Great	Some
Total	14	33	21	43	39	39	10	31	34	39	17	45	17	50
Type														
Doctoral	0	15	0	28	26	46	3	29	44	40	27	41	22	45
Comprehensive	6	27	11	43	33	47	5	24	41	34	18	45	18	47
Baccalaureate	11	32	10	36	45	26	6	26	46	30	25	49	12	53
Two-year	19	38	32	47	40	43	15	37	24	45	12	44	18	50
Control														
Public	13	37	32	44	40	41	9	25	28	41	15	43	18	48
Private	15	27	7	42	38	38	11	38	42	36	20	48	16	52
Enrollment size														
Less than 1,000	19	26	9	46	44	37	15	40	27	41	14	45	15	42
1,000 - 4,999	14	32	23	46	37	41	7	31	37	35	16	46	18	51
5,000 or more	10	40	30	36	38	39	11	24	35	42	23	44	16	54
Region														
Northeast	17	33	18	49	46	35	12	35	53	31	19	47	24	55
Central	17	40	18	41	34	40	5	44	24	41	15	44	17	54
Southeast	13	24	27	38	34	45	4	29	34	39	21	46	13	51
West	8	35	22	44	43	35	18	18	26	43	14	44	13	39

SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Table A-12. Percentage of financial officials reporting their institution conducted major renovation or expansion of facilities from 1980-81 to 1987-88, by institutional characteristic: United States

Institutional characteristic	Library facilities	Academic and research facilities	Computing facilities
Total	33	48	72
Type			
Doctoral	47	91	71
Comprehensive	32	54	67
Baccalaureate	37	43	80
Two-year	29	43	69
Control			
Public	33	52	67
Private	32	43	77
Enrollment size			
Less than 1,000	24	33	69
1,000-4,999	38	49	76
5,000 or more	31	58	67
Region			
Northeast	36	53	77
Central	32	39	70
Southeast	39	51	74
West	23	48	65

SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Table A-13. Percentage of financial officials stating their institution took various actions in the 1980s that might affect costs and their evaluation of the impact of taking the actions: United States

Type of action	Took action	Impact of action		
		Great	Some	None
Increased the student/faculty ratio	37	15	81	4
Eliminated academic programs	51	10	75	16
Eliminated academic departments	20	17	74	9
Established cooperative programs	51	4	55	41
Increased faculty workload	26	8	87	4
Eliminated faculty positions	45	16	82	3
Increased use of part-time faculty	62	21	75	4
Increased use of nontenured faculty	26	9	82	9
Encouraged faculty early retirement	38	11	70	19
Reorganized the administration	62	12	64	25
Improved use of computer technology	95	17	59	24
Delayed/modified plans for new construction	42	24	62	14
Deferred maintenance of facilities	56	19	73	7
Deferred upgrading of computer facilities	28	15	80	5
Implemented institution-wide budget cuts	58	28	70	2

NOTE: Percentages may not add to 100 due to rounding.

SOURCE. Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Table A-14. Percentage of financial officials reporting their institution took various actions in the 1980s that might affect costs, by institutional characteristic: United States

Institutional characteristic	Actions taken in 1980s														
	Increased student/ faculty ratio	Eliminated academic programs	Eliminated academic departments	Established cooperative programs	Increased faculty workload	Eliminated faculty positions	Increased use of part-time faculty	Increased use of nontenured faculty	Encouraged faculty early retirement	Re-organized administration	Use of computer technology	Delayed/ modified new construction	Deferred maintenance	Deferred upgrading of computer facilities	Institution-wide budget cuts
Total	37	51	20	51	26	45	62	26	38	62	95	42	56	28	58
Type															
Doctoral	29	50	30	54	19	30	49	41	73	67	95	56	74	38	63
Comprehensive	39	57	36	47	14	44	59	38	53	59	96	38	66	28	60
Baccalaureate	33	43	15	55	23	30	64	26	34	56	95	48	55	36	54
Two-year	39	53	16	50	33	56	65	20	32	65	95	38	52	23	59
Control															
Public	41	54	19	55	23	48	68	29	46	67	94	37	60	25	58
Private	32	47	21	46	30	42	56	23	30	56	96	47	52	33	58
Enrollment size															
Less than 1,000	38	47	19	41	49	56	58	23	14	66	91	45	57	35	69
1,000 - 4,999	36	54	18	54	17	44	66	24	36	56	96	39	49	24	50
5,000 or more	37	49	23	54	21	38	60	31	61	68	96	43	66	29	61
Region															
Northeast	29	40	14	54	13	34	61	23	44	67	98	44	46	19	48
Central	37	57	28	49	27	53	57	26	40	56	95	45	65	29	57
Southeast	38	55	12	53	32	44	69	34	19	56	93	36	50	29	58
West	42	50	25	46	33	50	62	20	51	70	94	43	63	35	69

SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Table A-15. Percentage of financial officials that reported that various actions taken by their institution in the 1980s had a great impact on controlling costs, by institutional characteristic: United States

Institutional characteristic	Actions taken in 1980s														
	Increased student/ faculty ratio	Eliminated academic programs	Eliminated academic departments	Established cooperative programs	Increased faculty workload	Eliminated faculty positions	Increased use of part-time faculty	Increased use of nontenured faculty	Encouraged faculty early retirement	Re-organized administration	Use of computer technology	Delayed/ modified new construction	Deferred maintenance	Deferred upgrading of computer facilities	Institution-wide budget cuts
Total	15	10	17	4	8	16	21	9	11	12	17	24	19	15	28
Type															
Doctoral	–	5	–	2	–	–	10	6	7	7	14	20	25	13	36
Comprehensive	8	8	15	3	–	19	18	9	14	2	12	7	13	14	27
Baccalaureate	17	8	–	0	–	15	20	–	11	16	19	25	28	14	32
Two-year	16	12	–	7	6	15	23	10	11	14	18	30	16	16	25
Control															
Public	19	9	12	7	12	13	22	11	13	9	15	19	13	14	29
Private	9	11	22	0	4	19	18	6	8	15	19	30	28	16	27
Enrollment size															
Less than 1,000	–	–	–	–	3	16	8	–	–	17	17	28	20	–	24
1,000 - 4,999	22	11	22	5	23	13	27	6	11	15	17	23	21	17	30
5,000 or more	13	5	6	5	1	19	20	15	14	5	17	23	17	20	29
Region															
Northeast	19	6	–	0	–	25	13	0	9	[illegible]	22	12	13	–	20
Central	21	11	18	0	–	9	23	8	14	[illegible]	13	21	26	18	32
Southeast	13	9	–	3	9	7	21	2	7	10	18	38	21	8	27
West	9	12	21	14	14	25	25	32	13	14	16	28	16	21	30

– Too few cases for a reliable estimate.

SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Table A-16. Percentage of financial officials reporting their institution took various management initiatives in the 1980s and their evaluation of the effectiveness of the actions taken: United States

Management initiative	Took action	Effectiveness of action		
		Very	Somewhat	Not at all
Used outside consultant	33	11	78	10
Improved budgeting process	82	31	67	2
Developed long-range strategic plan	78	29	65	6
Management information system	68	32	67	1
External budget reviews	18	19	68	12

NOTE: Percentages may not add to 100 due to rounding.

SOURCE. Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989)

Table A-17. Percentage of financial officials reporting their institution took various management initiatives in the 1980s and the percentage saying those initiatives were very effective, by institutional characteristic: United States

Institutional characteristic	Management initiatives taken in 1980s									
	Used outside consultant		Improved budgeting process		Long-range strategic plan		Management information system		External budget reviews	
	Took action	Very effective	Took action	Very effective	Took action	Very effective	Took action	Very effective	Took action	Very effective
Total	33	11	82	31	78	29	68	32	18	19
Type										
Doctoral	40	6	80	34	71	35	76	21	10	--
Comprehensive	27	13	83	41	71	26	77	29	19	--
Baccalaureate	45	12	83	37	82	40	71	38	17	--
Two-year	28	11	82	24	79	23	63	32	19	18
Control										
Public	26	11	83	24	78	20	67	32	15	13
Private	42	11	81	39	78	39	69	33	22	24
Enrollment size										
Less than 1,000	47	8	78	31	77	30	63	31	27	--
1,000 - 4,999	27	18	83	35	80	32	68	34	15	--
5,000 or more	32	7	84	26	77	23	72	32	16	17
Region										
Northeast	25	6	83	36	79	41	73	45	15	--
Central	36	11	76	35	71	28	66	23	19	--
Southeast	39	16	84	25	84	23	66	29	15	--
West	33	9	85	30	78	25	68	31	23	--

-- Too few cases for a reliable estimate.

SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Table A-18. Percentage of financial officals reporting their institution had authority to adjust tuition levels, and mean in-state undergraduate tuition levels at public institutions for 1988-89, by institutional characteristic: United States

Institutional characteristic	Degree of authority			Mean undergraduate tuition at public institutions	
	Full	Limited	None	Full authority	Limited or no authority
	(percent)			(dollars)	
Total	55	12	33	1,400	900
Type					
Doctoral	61	4	35	2,200	1,400
Comprehensive	54	4	42	1,400	1,400
Baccalaureate	82	7	11	1,700	1,300
Two-year	40	18	42	1,200	700
Control					
Public	22	19	59	–	–
Private	93	4	3	–	–
Enrollment size					
Less than 1,000	80	7	13	–	700
1,000-4,999	59	11	30	1,300	1,000
5,000 or more	29	16	54	1,600	900
Region					
Northeast	74	5	21	1,800	1,500
Central	67	14	20	1,500	1,300
Southeast	49	15	36	1,300	800
West	31	13	55	700	600

– Not applicable

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Table A-19. Financial officials' evaluation of the impact of various factors on tuition and fee increases at their institution between 1980-81 and 1988-89: United States

Factors which might affect tuition increases	Experiencing each factor*	Impact on tuition increases				Among top two
		Great	Some	Slight	None	
		(percentages)				
Increase in academic expenditures	92	44	49	5	2	43
Increase in administrative expenditures	92	22	59	16	3	11
Increase in operating expenditures	92	39	52	7	2	36
Decrease in proportion of Federal funding	78	17	29	32	22	10
Decrease in proportion of State/ local funding	76	28	24	23	25	20
Decrease in proportion of non-government funding	76	8	19	36	38	2
Make up for shortfalls in research costs	51	1	8	15	76	0
Desire to improve the quality of the institution	89	35	44	15	6	23
Tuition charges at peer institutions	86	15	44	23	18	7
Growth in status or popularity of institution	83	8	29	25	38	2
Increase in institutional student aid	86	27	24	23	27	17
State tuition policy requirements	63	37	17	13	33	23

*This column lists the percentage of financial officials who gave a response concerning the level of impact rather than marking the factor as not applicable. Some institutions may have chosen to answer "no impact" rather than mark "not applicable" when they had not experienced one of the factors listed.

NOTE: Percentages may not add to 100 due to rounding.

SOURCE. Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Table A-20. Percentage of financial officials reporting that various factors had a great impact on tuition and fee increases between 1980-81 and 1988-89 at their institution, by institutional characteristic: United States

Institutional characteristic	Increase in expenditures			Decrease in proportion of funds			Shortfalls in research costs	Improve quality of institutions	Tuition at peer institutions	Growth in status or popularity	Increase in student aid	State tuition policy
	Academic	Administrative	Operating	Federal	State/local	Non-government						
Total	44	22	39	17	28	8	1	35	15	8	27	37
Type												
Doctoral	57	21	26	7	34	6	3	47	11	6	23	29
Comprehensive	46	17	33	12	31	3	0	42	13	11	32	49
Baccalaureate	48	29	55	33	17	16	0	40	19	10	53	19
Two-year	40	20	33	10	32	4	1	28	13	6	9	39
Control												
Public	42	17	26	5	43	4	1	29	14	5	4	50
Private	47	27	53	29	9	11	1	41	16	12	47	0
Enrollment size												
Less than 1,000	39	28	53	25	11	11	0	35	12	4	25	12
1,000 - 4,999	42	18	35	21	27	9	0	38	19	11	37	38
5,000 or more	52	23	33	5	42	3	1	30	10	7	10	48
Region												
Northeast	49	30	45	25	18	9	1	43	15	8	37	27
Central	45	18	45	17	38	9	0	35	7	8	28	18
Southeast	47	19	30	15	21	6	1	31	17	10	20	42
West	35	19	37	10	37	6	0	31	20	7	22	53

SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Table A-21. Financial officials' estimation of the effect of a 5 percent tuition increase on applications, by institutional characteristic: United States

Institutional characteristic	Increase more than 10 percent	Increase 2-10 percent	No change	Decrease 2-10 percent	Decrease more than 10 percent
Total	1	6	67	24	2
Type					
Doctoral	0	2	84	14	0
Comprehensive	2	3	73	21	1
Baccalaureate	0	8	53	33	6
Two-year	2	6	70	22	0
Control					
Public	2	4	77	17	0
Private	1	8	55	33	3
Enrollment size					
Less than 1,000	2	9	49	38	1
1,000 - 4,999	2	5	67	23	3
5,000 or more	0	4	80	15	0
Region					
Northeast	1	5	63	28	3
Central	4	7	60	26	3
Southeast	0	5	75	18	1
West	0	6	68	26	0

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (survey conducted in 1989).

Appendix B

Technical Notes

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Higher Education Surveys

The Higher Education Surveys (HES) system was established to conduct brief surveys of higher education institutions on topics of interest to Federal policy makers and the education community. The system is sponsored by the National Science Foundation, the U.S. Department of Education, and the National Endowment for the Humanities.

HES questionnaires typically request a limited amount of readily accessible data from a subsample of institutions in the HES panel, which is a nationally representative sample of 1,093 colleges and universities in the United States. Each institution in the panel has identified a HES campus representative, who serves as survey coordinator. The campus representative facilitates data collection by identifying the appropriate respondent for each survey and distributing the questionnaire to that person.

Survey Methodology

This mail survey was conducted at the request of the U.S. Department of Education as one component of the congressionally mandated Higher Education Cost Study. This information was collected to provide reliable national estimates on the financial condition of higher education institutions and the sources of tuition increases, as perceived by finance officials at higher education institutions. Other components of the study include analysis of financial data over time (as collected in IPEDS/HEGIS) and case studies of finances at specific higher education institutions.

The sample for this survey consisted of half of the HES panel, excluding specialized schools, resulting in a mailing to 473 institutions.[1] The questionnaire was mailed on November 10, 1988, and telephone followup for nonresponse was begun on December 6. Completed questionnaires were examined for internal inconsistencies or missing data, with telephone followup to verify the information in question. Data supplied on tuitions were also compared to HEGIS data for 1980 and 1985, and inconsistencies were verified through telephone followup. Data collection ended on March 8, 1989. Data were adjusted for questionnaire nonresponse and weighted to national totals.

The overall response rate was 91 percent, based on 428 responses from 469 eligible institutions. The response rates were 87 percent for private institutions, 94 percent for public institutions, and by type of institution ranged from 89 percent at two-year institutions to 95 percent at doctoral institutions.

[1] Specialized schools are baccalaureate or postbaccalaureate schools characterized by a programmatic emphasis in one area (plus closely related specialties), as measured by the percentage of degrees granted in the program area. Some examples of specialized schools are medical schools, law schools, and seminaries. Specialized schools were excluded because their tuitions and finances often differ considerably from those of other higher education institutions.

The weighted item response rate was 97 percent or higher for all questions on the questionnaire (Appendix Table B-1). Thus, item nonresponse was minimal, and statistics presented in this report may be interpreted as accurately representing the responses of the sampled institutions.

Several items on the questionnaire asked for respondents' opinions rather than obtaining numeric measures of such items as costs and expenditures. This choice was made both to limit respondent burden and because financial officials' opinions were considered a relevant factor in setting tuitions. Opinion data may be biased if the responding institutions provide answers that are a defense against public criticism of their tuition increases, or if officials of these institutions are simply mistaken in their impressions. Also, because of the nature of the survey, the questions asked were subjective and called for financial officials' impressions regarding the effects of certain activities rather than specific numerical estimates of these effects. Where feasible, other components of the OPBE study will seek to verify the findings here by examining other types of data. However, in many cases the survey responses will represent the only existing data regarding certain issues and, hence, are valuable even given these limitations.

A separate public use file was created that included only those 367 institutions that gave permission to release the data with their institutional identification code attached. A second set of weights was calculated to adjust for this additional nonresponse, with poststratification used to correct for differences among institutions in granting permission depending on the tuition charged. Both sets of weights were designed to sum to the same total number of institutions; however, the differences in the number of responding institutions and in the weights may result in slightly different estimates and standard errors when comparing tabulations from the public use file to those in this report.

Reliability of Survey Estimates

The findings presented in this report are estimates based on the sample from the HES panel and, consequently, are subject to sampling variability. If the questionnaire had been sent to a different sample, the responses would not have been identical; some figures might have been higher, while others might have been lower. The standard error is a measure of the variability due to sampling when estimating a statistic. It indicates how much variability there is in the population of possible estimates of a parameter for a given sample size. Standard errors can be used as a measure of the precision expected from a particular sample. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the true population parameter being estimated in about 95 percent of the samples. This is a 95 percent confidence interval. For example, the estimated percentage of institutions reporting that marketing and recruiting costs rose faster than inflation is 58.3 percent and the estimated standard error is 2.4. The 95 percent confidence interval for this statistic extends from 58.3 - (2.4 times 1.96) to 58.3 + (2.4 times 1.96), or from 53.6

Table B-1. Response rate for each item on the higher education finance questionnaire: United States

Question number	Description	Response rate	
		Unweighted	Weighted
1	Current financial condition of institution	100	100
2	1988-89 tuition and fees	100	100
	1989-90 undergraduate tuition and fees	97	98
	1989-90 graduate tuition and fees	95	97
3	1988-89 room and board charges	100	100
	1989-90 room and board charges	97	98
4	Full-time and part-time enrollment	99	99
5	Projected change in 1993-94 enrollment	99	99
6a	Changes in expenditures compared to inflation	98	98
6b	Two factors contributing most to increase in nonacademic expenditures	97	98
7a	Impact of factors on increases in expenditures	99	100
7b	Two most important factors in expenditure increases	99	100
8	Renovation or expansion of facilities	100	100
9	Authority to adjust tuition levels	100	100
10	Did institution increase tuition and fees	100	100
10a	Impact of factors on tuition increases	97	98
10b	Two most important factors for increases in tuition	98	98
11	Effect of increase in tuition and fees on applications	99	99
12	Actions taken in 1980s	99	99
	Impact of actions on controlling costs	98	97
13	Actions taken in 1980s	99	99
	Impact of actions on increasing revenues	98	98
14	Management initiatives performed in 1980s	99	99
	Effectiveness of initiatives	97	97
15	Permission to release data	99	100

SOURCE. Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U S Department of Education, 1990 (survey conducted in 1989)

to 63.0 percent. This means one can be 95 percent confident that this interval contains the true population value. Estimates of standard errors for the estimates were computed using a replication technique known as jackknife replication. Some key statistics and their estimated standard errors are shown in Appendix Table B-2.

For categorical data, relationships between variables with 2 or more levels have been tested in a two-way analysis, using chi-square tests at the .05 level of significance, adjusted for average design effect. If the overall chi-square test was significant, it was followed with tests using a Bonferroni t statistic, which maintained an overall 95 percent confidence level or better. Unless noted otherwise, all comparisons made in this report were statistically significant using these tests.

In some cases, only a small number of sampled institutions responded to a particular questionnaire item. For example, only 9 institutions of those with less thar 1,000 students reported that they eliminated academic departments, and thus were able to describe the impact of that action on controlling costs. Such cases are noted in the appendix tables. All estimates provided in this report are based on more than 25 responding institutions.

Survey estimates are also subject to errors of reporting and errors made in the collection of the data. These errors, called nonsampling errors, can sometimes bias the data. While general sampling theory can be used to determine how to estimate the sampling variability of a statistic, nonsampling errors are not easy to measure and usually require that an experiment be conducted as part of the data collection procedures or the use of data external to the study.

Nonsampling errors may include such things as differences in the respondents' interpretation of the meaning of the questions, differences related to the particular time the survey was conducted, or errors in data preparation. During the design of the survey and survey pretest, an effort was made to check for consistency of interpretation of questions and to eliminate ambiguous items. The questionnaire was pretested with respondents like those who completed the survey, and the questionnaire and instructions were extensively reviewed by OPBE in the U.S. Department of Education. Manual and machine editing of the questionnaires were conducted to check the data for accuracy and consistency. Cases with missing or inconsistent items were recontacted by telephone; data were keyed with 100 percent verification.

School Type Relationships

The data in this report are presented as "total" figures, which represent all kinds of schools grouped together, and for schools broken down by school control and school "type." These classifications are as follows:

- School control
  - Public
  - Private

Table B-2. Selected standard errors by institutional characteristic: United States

Institutional characteristic	Mean undergraduate tuition and fees in 1988-89				Percent reporting ability to obtain desired revenues as excellent		Percent reporting that marketing and recruiting costs rose faster than inflation		Percent reporting that recruiting nontraditional students had great impact on increasing revenues*	
	Public		Private							
	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error
Total	$1,016.0	38.5	$6,610 3	204.5	11.1	1.8	58.3	2.4	20.1	2.8
Type										
Doctoral	1,759.2	90 6	10,632.0	454.7	16.2	4.3	59.0	5.9	2.4	2.3
Comprehensive	1,367.7	56.7	7,173.9	367.4	7.4	2.6	51.7	5.1	16.9	5.4
Baccalaureate	1,343 8	109.4	6,904.0	276 4	15.5	4.6	65.6	5.2	28.1	4 8
Two-year	792.9	52.6	5,307.6	441.4	9.2	2.5	56.5	3.9	18.3	3.8
Control										
Public	--	--	--	--	9.0	2.5	45.0	2.9	12.0	2.6
Private	--	--	--	--	13.6	2.7	73.9	3.8	30.7	5.1
Enrollment size										
Less than 1,000	702.2	169.3	5,652.2	319.6	7.3	3.2	64.3	6.0	35.9	7.4
1,000 - 4,999	1,029.6	65.3	7,166.6	265.5	13.3	3.7	62.2	3.9	21.3	3.9
5,000 or more	1,044.5	47.7	9,203.6	454.2	10.9	2.2	47.8	3.1	6.9	2.6
Region										
Northeast	1,591.7	93.7	7,499.2	404.5	7.6	2.0	68.5	4 8	21.9	5.7
Central	1,375.7	107.3	6,822.3	351.9	5.2	1.6	68.9	5.6	24.1	5.6
Southeast	867.2	54.5	5,175.9	318.2	19.5	5.5	51.1	5.4	18.2	5.6
West	624.3	40.8	6,693.2	475.8	11.4	3.9	45.6	5.2	16.3	4.3

*Percentages are based on those institutions that reported acting to recruit nontraditional students in the 1980s.

-- Not applicable

SOURCE. Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U S Department of Education, 1990 (survey conducted in 1989).

- School type (based on the U.S. Department of Education's HEGIS classifications)

  - Doctorate-granting: schools characterized by a significant level and breadth of activity in an commitment to doctoral-level education as measured by the number of doctorate recipients and the diversity in doctoral-level program offerings.

  - Comprehensive: schools characterized by diverse postbaccalaureate programs (including first-professional) but which do not engage in significant doctoral-level education.

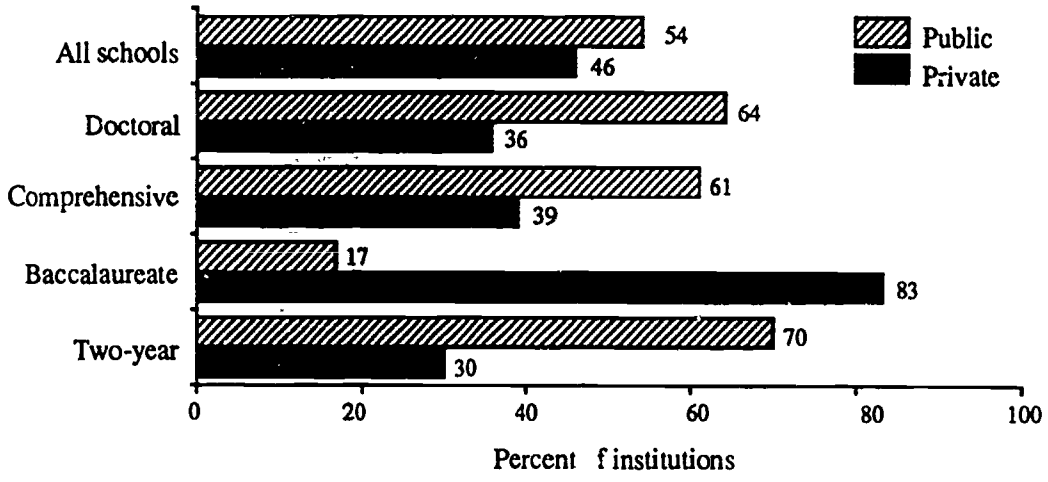
  - Baccalaureate: schools characterized by their primary emphasis on general undergraduate, baccalaureate-level education, and which are not significantly engaged in postbaccalaureate education.

  - Two-year: schools that confer at least 75 percent of their degrees and awards for work below the bachelor's levels.

As can be seen in Figures B-1 and B-2, these school characteristics are related to each other. For example :

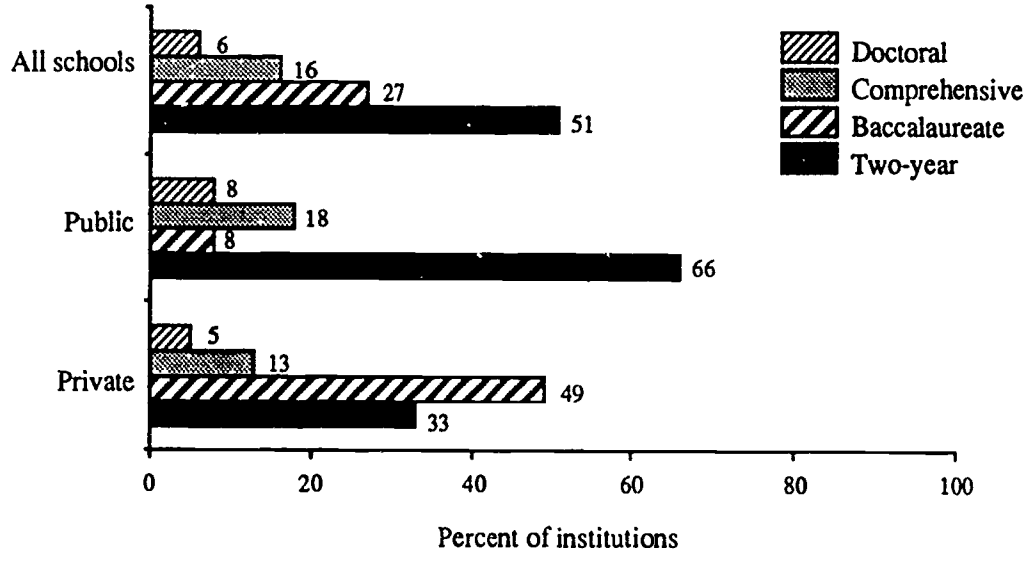
- Among doctoral schools, 64 percent are public.
- Among comprehensive schools, 61 percent are public.
- Among baccalaureate schools, 83 percent are private.
- Among two-year institutions, 70 percent are public.
- Among public schools, 66 percent are two-year.
- Among private schools, 49 percent are baccalaureate.

Figure B-1. Percentage of higher education institutions that are public and private by type: United States



SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (1989 survey).

Figure B-2. Percentage of higher education institutions that are doctoral, comprehensive, baccalaureate, and two-year by control: United States



SOURCE: Higher Education Surveys, The Finances of Higher Education Institutions (HES 8), U.S. Department of Education, 1990 (1989 survey).

Appendix C

Survey Questionnaire

Higher Education Surveys

OMB #3145-0009
Exp. 1/31/90

SURVEY ON HIGHER
EDUCATION FINANCE

November 1988

Dear Colleague:

On behalf of the Department of Education, I ask you to participate in this survey on higher education finance.

This survey is part of a larger Higher Education Cost Study that was mandated by Congress. Its purpose is to measure the cost of higher education, the contributing factors, and the degree to which those factors affect changes in cost. The completion of the questionnaire should take approximately 45 minutes. While your participation is voluntary, we hope you will take the time to answer these questions so that the data we collect will be representative of the universe of postsecondary institutions.

A few questions (on tuition and fees, room and board charges, and enrollment) are also on IPEDS questionnaires; they are included here because the IPEDS data will not be available in time to complete a required report to Congress. Please give the same answers you supply for IPEDS, and use the same definitions given in IPEDS.

As is our custom, a copy of the HES report will be sent to your institution after this study is completed.

If you have any questions, please call Bradford Chaney of Westat (800-937-8281) or Dan Goldenberg of the Department of Education (202-732-3565). Thank you for your assistance.

Sincerely,

Alan Ginsburg
Director, Planning and
Evaluation Service

Sponsored by the National Science Foundation, the National Endowment for the Humanities, and the Department of Education

DEFINITIONS

Note: When completing the questionnaire, please follow the same definitions used in IPEDS. For your convenience, the most important definitions are listed below.

Academic expenditures/academic support

Support services that are an integral part of the institution's primary mission of instruction, research, or public service Include expenditures for libraries, museums, administration, personnel development, and course and curriculum development Include expenditures for veterinary and dental clinics if their primary purpose is to support the institutional program

Administrative expenditures

Institutional support (see below) plus student services.

Auxiliary processes

Essentially self-supporting operations of the institution that exist to furnish a service to students, faculty, or staff, and that charge a fee that is directly related to, although not necessarily equal to, the cost of the service. Examples are residence halls, food services, student health services, intercollegiate athletics, college unions, college stores, and barber shops

Full-time faculty

Includes faculty on Sabbatical leave, and faculty who are on leave but remain on the payroll.

Full-time student

Undergraduate A student enrolled for 12 or more semester credits; or 12 or more quarter credits; or 24 contact hours a week each term.

Graduate: A student enrolled for 9 or more semester credits, or 9 or more quarter credits.

Institutional support

Operational support of the institution, excluding expenditures for physical plant operations. Include general administrative services, executive direction and planning, legal and fiscal operations, and public relations/development.

Operating expenditures

Service and maintenance related to grounds and facilities used for educational and general purposes. Also include expenditures for utilities, fire protection, property insurance, and similar items. Do not include expenditures made from the institutional plant funds account.

Student services

Includes admissions, registrar activities, and activities whose primary purpose is to contribute to students' emotional and physical well-being and to their intellectual, cultural, and social development outside the context of the formal instructional program. Examples are career guidance, counseling, financial aid administration, and student health services (except when operated as a self-supporting auxiliary enterprise). For funding, include the administrative allowance for Pell grants.

Typical tuition and required fees

The dollar amount of tuition and required fees for an academic year most frequently charged for each of the types of full-time students indicated. If tuition is charged on a per credit hour basis, multiply the charge per credit hour by the number of hours that would normally be required per academic year to complete a degree or program at the level indicated.

Undergraduate students include (1) those who have not obtained a bachelor's degree; (2) all students in bachelor's degree programs which require at least 4 years but fewer than 6 years of college work; and (3) all students in occupational or general study programs requiring 1, 2, or 3 years of college work and which are designed to prepare students for immediate employment, or to provide general education rather than the first 1, 2, or 3 years of a bachelor's degree program.

Graduate students are those who have attained at least one standard bachelor's degree or first-professional degree and are, or could be, candidates for master's or doctor's degrees. DO NOT include candidates for the degrees of D P M , D.D.S., D.M.D., M.D., O.D., D.O., D.V.M., LL.B., J.D., B.D., or other first-professional degrees.

1. What is the current financial condition of your institution in the following two area

	Excellent	Good	Fair	Poor
Ability to obtain desired revenues	☐	☐	☐	☐
Ability to control expenditures	☐	☐	☐	☐

2. Please indicate your typical tuition and required fees for a full-time student for the full academic years listed below. Do not include room and board charges.

Check here if you have:
☐ No full-time undergraduate students
☐ No full-time graduate students

	Undergraduate tuition and fees		Graduate tuition and fees	
	In state	Out of state	In state	Out of state
1988-89	$_____	$_____	$_____	$_____
1989-90*	$_____	$_____	$_____	$_____

*(If not known, please estimate.)

3. If applicable, indicate below your **typical** room and board charges for the full academic years listed below:

Check here if you do not provide:
☐ Dormitory facilities for your students
☐ Meal plans for your students

	Room	Board
1988-89	$_____	$_____
1989-90*	$_____	$_____

*(If not known, please estimate.)

4. As of October 15, what was the full-time and part-time enrollment for the current (1988-89) academic year? Give the total number of students enrolled, not the total FTEs.

	Undergraduate	Graduate
Full-time	_____	_____
Part-time	_____	_____

5. Compared with your 1988-89 enrollment, do you project your 1993-94 enrollment to.

		Undergraduate		Graduate	
		Full-time	Part-time	Full-time	Part-time
a	Increase by more than 10 percent	☐	☐	☐	☐
b.	Increase by 6-10 percent	☐	☐	☐	☐
c.	Increase 2-5 percent	☐	☐	☐	☐
d.	Change by less than 2 percent	☐	☐	☐	☐
e.	Decrease by 2-5 percent	☐	☐	☐	☐
f.	Decrease by 6-10 percent	☐	☐	☐	☐
g.	Decrease by more than 10 percent	☐	☐	☐	☐

6a. How have the following components of expenditures changed at your institution between 1980-81 and 1987-88? Please give your best estimate, comparing your costs to the rate of inflation (40 percent) over that time period Have your expenditures increased faster than inflation (more than 45 percent), roughly the same rate as inflation (35 to 45 percent), or slower than inflation (less than 35 percent)? Include normal continuing costs at your institution, but exclude major changes in your operations such as major renovation or construction of facilities, or an expansion in the size of the student body or faculty. Include expenditures from your general budget, but not additional expenditures based on grants, etc.

		Relationship to inflation		
		Faster	Same rate	Slower
Academic expenditures				
a.	Average salaries and benefits for full-time faculty	☐	☐	☐
b.	Average salaries and benefits for part-time faculty	☐	☐	☐
c.	The costs of library collections and facilities	☐	☐	☐
d.	The costs of scientific equipment and facilities (excluding computers)	☐	☐	☐
e.	The costs of computing equipment and facilities	☐	☐	☐
Non-academic expenditures				
f.	Marketing and recruiting costs	☐	☐	☐
g.	Costs of complying with government regulations	☐	☐	☐
h.	Insurance costs	☐	☐	☐
i.	Student services costs	☐	☐	☐
j.	Administrative salaries for institutional support	☐	☐	☐
k.	Administrative salaries for academic support	☐	☐	☐
l.	Costs of development activities	☐	☐	☐
m.	Costs of administrative computing	☐	☐	☐
n.	Energy costs	☐	☐	☐

6b. In terms of the total dollar amount, what two factors contributed the most to the increase in non-academic expenditures at your institution between 1980-81 and 1987-88? Circle the two letters that correspond to the items in question 6a.

f g h i j k l m n

7a. Please indicate what impact, if any, the following factors have had on increases in expenditures at your institution between 1980-81 and 1987-88.

		Impact on expenditure increases				
		Not applicable	Great	Some	Slight	None
a.	Change in the percentage of part-time students	☐	☐	☐	☐	☐
b.	Increase in the cost of remediation programs for entering students	☐	☐	☐	☐	☐
c.	Change in total enrollment	☐	☐	☐	☐	☐
d.	Change in the demographic composition of the student body	☐	☐	☐	☐	☐
e.	New construction or rehabilitation of facilities	☐	☐	☐	☐	☐
f.	Increase in the number of faculty	☐	☐	☐	☐	☐
g.	New or more costly academic programs	☐	☐	☐	☐	☐
h.	Other (Specify)_____	☐	☐	☐	☐	☐

7b. What are the two most important factors that contributed to increases in the expenditures at your institution between 1980-81 and 1987-88? Circle the two letters below that correspond to the items in question 7a.

a b c d e f g h

8. Over the period 1980-81 through 1987-88, has your institution engaged in a major renovation or expansion of your facilities in the following areas?

	Yes	No
Library facilities	☐	☐
Academic and research facilities	☐	☐
Computing facilities	☐	☐

9. Does your institution have the authority to adjust tuition levels to meet your budgetary needs?

☐ Yes
☐ Only by a small amount
☐ No

10. Did your institution increase tuition and fees between 1980-81 and 1988-89?

☐ Yes (CONTINUE)
☐ No (SKIP TO QUESTION 11)

10a. The following factors have been associated with tuition and fee increases at higher education institutions. Please indicate what impact, if any, they have had on tuition and fee increases at your institution between 1980-81 and 1988-89. If you do not have authority to set tuition and fee increases, please indicate their importance for those who set your tuition levels.

			Impact on tuition increases			
		Not applicable	Great	Some	Slight	None
a.	Increase in academic expenditures	☐	☐	☐	☐	☐
b.	Increase in administrative expenditures	☐	☐	☐	☐	☐
c.	Increase in operating expenditures	☐	☐	☐	☐	☐
d.	Decrease in proportion of Federal funding	☐	☐	☐	☐	☐
e.	Decrease in proportion of State/local funding	☐	☐	☐	☐	☐
f.	Decrease in proportion of non-government revenue sources	☐	☐	☐	☐	☐
g.	Make up for shortfalls in research costs	☐	☐	☐	☐	☐
h.	The desire to improve the quality of the institution	☐	☐	☐	☐	☐
i.	Tuition charges at "peer" institutions	☐	☐	☐	☐	☐
j.	Growth in the status or popularity of the institution	☐	☐	☐	☐	☐
k.	Increase in institutional student aid	☐	☐	☐	☐	☐
l.	State tuition policy requirements	☐	☐	☐	☐	☐
m.	Other (Specify)_____	☐	☐	☐	☐	☐

10b. What are the <u>two most</u> important factors that contributed to increases in tuition and fees at your institution between 1980-81 and 1988-89? Circle the two letters below that correspond to the items in question 10a.

a b c d e f g h i j k l m

11. Suppose that tuition and fees for this year had been 5 percent **over and above** any increase that you actually implemented. How would the additional increase have affected the number of applications you received? Please give your best estimate.

☐ Increase of more than 10 percent
☐ Increase of 2-10 percent
☐ No change (or change of less than 2 percent)
☐ Decrease of 2-10 percent
☐ Decrease of more than 10 percent

12 Which of the following actions has your institution taken in the 1980s? For those which you checked "yes," what impact did they have on controlling costs?

		Have performed in 1980s?		Impact on controlling costs?		
		Yes	No	Great	Some	None
a.	Increased the student/faculty ratio	☐	☐	☐	☐	☐
b.	Eliminated academic programs	☐	☐	☐	☐	☐
c.	Eliminated academic departments	☐	☐	☐	☐	☐
d.	Established cooperative programs with other institutions	☐	☐	☐	☐	☐
e.	Increased faculty workload	☐	☐	☐	☐	☐
f.	Eliminated faculty positions	☐	☐	☐	☐	☐
g.	Increased the use of part-time faculty	☐	☐	☐	☐	☐
h.	Increased the use of nontenured faculty	☐	☐	☐	☐	☐
i.	Encouraged the early retirement of faculty	☐	☐	☐	☐	☐
j.	Reorganized the administration	☐	☐	☐	☐	☐
k.	Improved the use of computer technology	☐	☐	☐	☐	☐
l.	Delayed or modified plans for new construction	☐	☐	☐	☐	☐
m.	Deferred the maintenance of facilities	☐	☐	☐	☐	☐
n.	Deferred plans for upgrading computer facilities	☐	☐	☐	☐	☐
o.	Implemented institution-wide budget cuts	☐	☐	☐	☐	☐
p.	Other (Specify)_____	☐	☐	☐	☐	☐

13 Which of the following actions has your institution taken in the 1980s? For those which you checked "yes," what impact did they have on increasing revenues?

		Have performed in 1980s?		Impact on increasing revenues?		
		Yes	No	Great	Some	None
a	Took steps to reduce the student attrition rate	☐	☐	☐	☐	☐
b	Increased part-time enrollment	☐	☐	☐	☐	☐
c.	Recruited nontraditional students	☐	☐	☐	☐	☐
d.	Implemented an enrollment management program	☐	☐	☐	☐	☐
e.	Created fee charges for users of certain services	☐	☐	☐	☐	☐
f.	Increased efforts to obtain research funds	☐	☐	☐	☐	☐
g.	Increased efforts to obtain voluntary contributions	☐	☐	☐	☐	☐
h.	Acted to receive more State or Federal aid	☐	☐	☐	☐	☐
i.	Sought increased earnings from auxiliary processes (excluding room and board)	☐	☐	☐	☐	☐
j.	Sought increased earnings from room and board	☐	☐	☐	☐	☐
k.	Other (Specify)_____	☐	☐	☐	☐	☐

14 Which, if any, of the following management initiatives has your institution performed in the 1980s? For those which you checked "yes," how effective were they?

		Have performed in 1980s?		How effective were they?		
		Yes	No	Very	Some-what	Not at all
a.	Used an outside consultant to evaluate the school's management system	☐	☐	☐	☐	☐
b.	Improved the budgeting process	☐	☐	☐	☐	☐
c.	Developed a long-range strategic plan	☐	☐	☐	☐	☐
d.	Implemented or modified a management information system	☐	☐	☐	☐	☐
e.	Used external budget reviews	☐	☐	☐	☐	☐
f.	Other (Specify)_____	☐	☐	☐	☐	☐

15. Do we have permission to release this data to the Department of Education with your institutional identification code? This would allow the Department of Education to use data from other surveys (e.g., IPEDS) to help analyze the results. All information published by the Department of Education will be in aggregate form only.

☐ Yes
☐ No

Please sign_____

Thank you for your assistance. Please return this form by December 7 to:

Higher Education Surveys
WESTAT
1650 Research Boulevard
Rockville, MD 20850

Person completing form:

Name:_____

Title:_____

Telephone:_____

Please keep a copy of this survey for your records.

If you have any questions or problems concerning this survey, please call Bradford Chaney at (800) 937-8281 (toll-free).