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ABSTRACT

A survey conducted by the Higher Education Panel sought trends in various items of information about the financial condition of colleges and universities. A stratified sample of 760 institutions was used, excluding major research universities. Information was requested on basic finance data, dormitory occupancy rates, occurrence of institutional loan defaults or moratoria, and selected faculty and student information. The response rate was 68 percent. Responses were statistically adjusted to represent the eligible national population of 2,508 institutions. Data are for the academic years 1974-75, 1976-77, and 1978-79. A series of financial indicators (ratios) were developed to use these and other data. They treat two basic types of resources: financial (relating to the value of available assets), and nonfinancial (faculty, students, administrators, and physical plant). The trends assessed are in current fund ratios, ratio of available fund balance to operating expenses, ratio of fixed commitments to revenues, and ratio of salaries and wages to total expenditures. Trends are shown for institution type and sector. Appended are the survey instrument, methodology notes, and notes on survey estimate reliability. (MSE)

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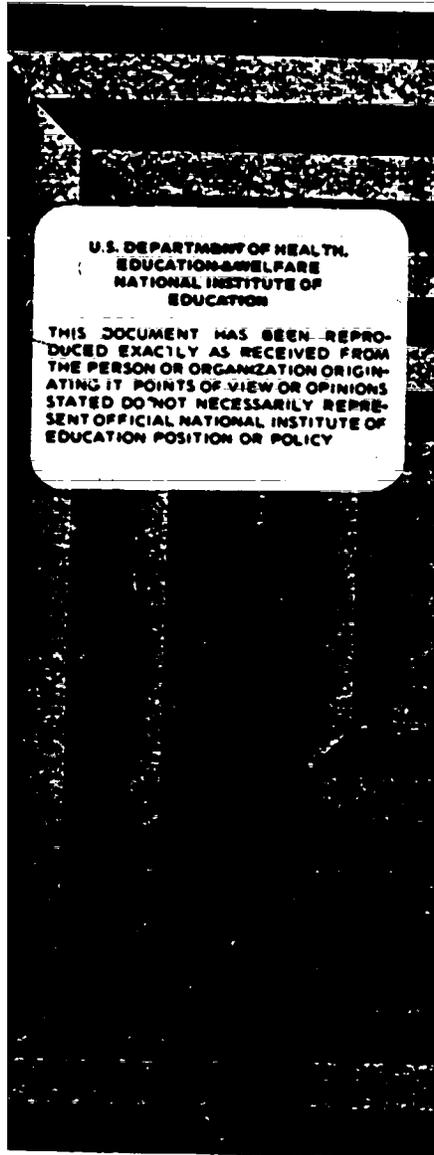


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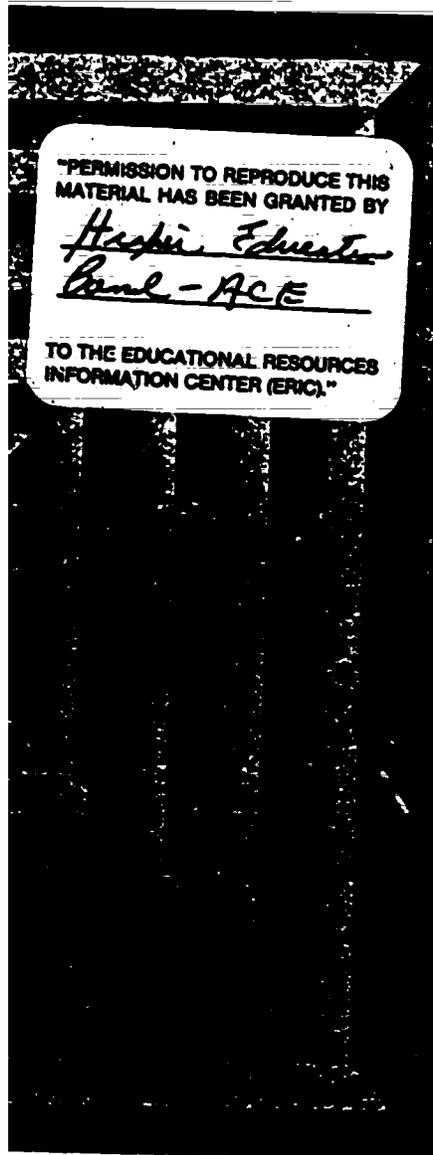


EDUCATION PANEL REPORT, NATIONAL
COUNCIL ON EDUCATION

Funded by the National Science
and National Endowment for Education

FINANCIAL COLLEGES UNIVERSITIES

Frank J. Atelsek



APRIL
1981

the U. S. Department of Education,
the Humanities

AMERICAN COUNCIL ON EDUCATION

J. W. Pelham, *President*

The American Council on Education, founded in 1918, is a council of educational organizations and institutions. Its purpose is to advance education and educational methods through comprehensive voluntary and cooperative action on the part of American educational associations, organizations and institutions.

The Higher Education Panel is a survey research program established by the Council for the purpose of securing policy-related information quickly from representative samples of colleges and universities. Higher Education Panel Reports are designed to expedite communication of the Panel's survey findings to policy-makers in government, in associations, and in educational institutions across the nation.

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Trends in Financial Indicators
of Colleges and Universities

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~~Higher Education Panel Reports~~
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We are especially grateful to the Panel's campus representatives and survey respondents for their continued assistance and cooperation.

Background

This Panel survey sought trends in various items of information related to the financial condition of colleges and universities. It is part of a larger effort funded by the U.S. Department of Education and conducted jointly by the American Council on Education (ACE) and the National Association of College and University Business Officers (NACUBO). The objectives of the larger study are to assess the financial causes of strength and weakness in colleges and universities, identify the students potentially most affected by institutional hardship, and to develop feasible policy alternatives to remedy financial difficulties.

The findings from the HEP survey were merged with data collected earlier by the Higher Education General Information Surveys (HEGIS) for the same three academic years in the areas of finance, enrollment, and instructional faculty. The purpose of the HEP survey was to collect needed finance-related data not otherwise available and to present a basic report of the observed trends.

Combining these survey data with other available information made it possible to develop a set of elementary but unique financial indicators that will be of interest to many readers. This report is primarily descriptive, rather than analytical, and leaves discussion of the merits of particular indicators and how they interrelate to the larger ACE-NACUBO financial conditions project. That report will provide detailed descriptions of the financial indicators, analysis of the theoretical framework established to measure financial stability, and suggestions of appropriate responses by institutions that are less financially secure. The report of the financial conditions project is expected to be completed in early summer, 1981.

Methods Summary

The Higher Education Panel is an ongoing survey research program, created in 1971 by the American Council on Education to conduct specialized surveys on topics of

current policy interest to the higher education community and to government agencies.

The Panel is a stratified sample of 760 colleges and universities drawn from the population of more than 3,000 higher education institutions listed in the National Center for Education Statistics' Education Directory. All institutions in this population are grouped in terms of the variables constituting the Panel's stratification design, which is based primarily on type (universities, four-year colleges, two-year colleges), control (public, private), and size (full-time-equivalent enrollment). For any given survey, either the entire Panel or an appropriate subgroup is used.

Because of the kinds of information requested for this survey and the nature of the financial indicators, certain categories of institutions were excluded. *Most notably, those excluded were major research universities, whose financial structures are too complex to be analyzed by the same methods used for examining smaller institutions' status.* Also excluded from the survey were medical and other health profession schools, bible colleges and seminaries, and other highly specialized institutions whose expenditure patterns differ markedly from all other institutions.

The survey instrument (see Appendix A) was mailed on February 19, 1980, to the 600 eligible Panel member institutions. Respondents were asked to report, for the academic years 1974-75, 1976-77, and 1978-79, basic finance data, dormitory occupancy rates, the occurrence of institutional loan defaults or moratoriums, and selected faculty and student information.

After extensive mail and telephone follow-up efforts, usable responses by the close of the field phase were received from 410 institutions, or 68 percent of those surveyed. Data from responding institutions were statistically adjusted to represent the eligible national population of 2,508 universities, four-year colleges, and two-year colleges. Basic statistical tables precede Appendix A.

Appendix B presents the stratification design for weighting survey responses to national estimates, as well as a comparison of respondents and nonrespondents.

~~Appendix~~ is a discussion of the reliability of survey estimates and displays ninety percent confidence intervals.

Results

A series of financial indicators (ratios) were developed under the ACE-NACUBO financial conditions project to utilize available federal data and information to be collected by this HEP survey. The indicators were devised to reveal different aspects of financial condition and the relative amount of financial stress upon an institution. They do not address the issues of instructional quality or educational mission.

The indicators treat two basic types of resources-- *financial*, which relate to the value of available assets, and *nonfinancial*, which relate to faculty, students, administrators, and the physical plant. The following financial indicators assess (1) financial resources, (2) estimated risk, (3) changes affecting financial resources, and (4) nonfinancial resources.

A few words of caution are necessary at this point. First, the reported indicators are *averages* of institutional data; some individual institutions may differ markedly from the mean. To provide a clearer picture of the trends, we have also reported, for each indicator, the number of institutions whose ratios have steadily increased or decreased (i.e., have experienced a percentage change of 5 percent or more between 1974-75 and 1976-77 and between 1976-77 and 1978-79).

Further, the indicators are far more complex than they may appear. Certain indicators are based upon early reports in the fall, whereas others come from end-of-year statements; the significance of an indicator can be negated by some temporary reporting change in one of its components; and it is unknown whether the pair of two-year periods used in this survey provide an adequate trend line.

Finally, readers should be cautioned against comparing one institutional type with another, particularly public and private institutions, because in many financial and administrative respects, they are not comparable.

Financial Resources

The following statistics are used to approximate the level of an institution's financial resources:

1. *Current fund ratio*

$$\frac{\text{current fund assets}}{\text{current fund liabilities}}$$

This indicator is for the short term and describes an institution's immediate ability to pay debts due within one year. A ratio below 1.00 reflects insufficient liquidity to pay current bills and a probable cash-flow problem.

As shown in figure 1, the current fund ratios for each individual type are all well above 1.00. The ratios for public and private universities* have held fairly stable, whereas the ratio for public four-year colleges has steadily increased. The relative positions of private four-year colleges and both public and private two-year colleges have declined. The numbers of institutions with steadily increasing or steadily decreasing ratios are fairly consistent with the trends of the different institutional types, with the exception of private two-year colleges. The same small number that showed decreases also showed increases.

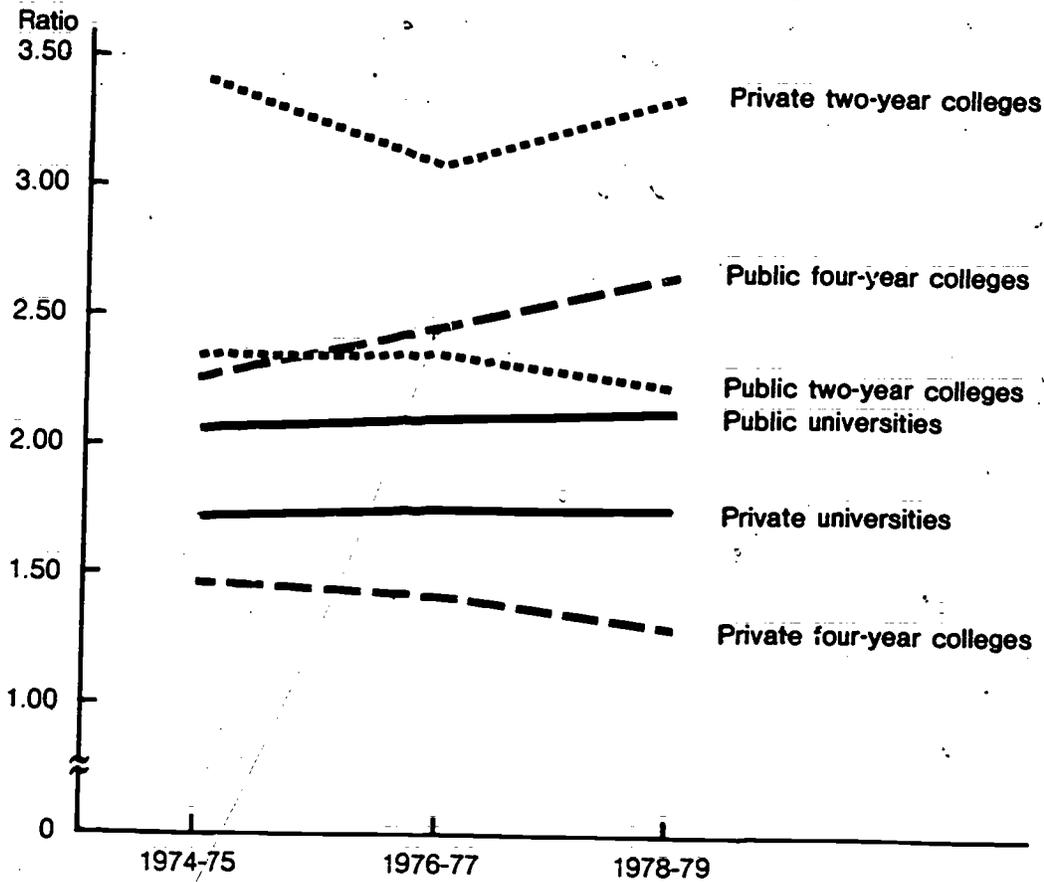
Public institutions, however, are able to maintain liquidity by drawing from governmental bodies that provide partial support. Thus, the decline in liquidity shown by private institutions should be of greater concern than the decline shown by public institutions. The erosion of current fund assets in relation to current fund liabilities shown by private four-year institutions may signal increasing difficulty in meeting current obligations and should continue to be monitored.

2. *Ratio of available fund balances to operating expenses*

$$\frac{\text{current fund balance} + \text{quasi-endowment fund balance}}{\text{educational and general expenditures} + \text{mandatory transfers}}$$

* We reiterate that major research universities, as well as other specialized institutions, were excluded from this survey.

Fig. 1. Trends in Current Fund Ratios*



* $\frac{\text{current fund assets}}{\text{current fund liabilities}}$

Institutional Category	Number	Institutions with Ratios	
		Increasing > 5% Each Period	Decreasing > 5% Each Period
Public universities	51	6	8
Public four-year colleges	363	95	39
Public two-year colleges	900	51	144
Private universities	37	4	5
Private four-year colleges	914	135	214
Private two-year colleges	243	30	30

This indicator depicts for the intermediate term the relative amount of resources--financial reserves--an institution has available to deal with a financial crisis of moderate (one to three years') duration. The lower the ratio, the less there is in reserve. Since many public institutions do not or cannot have fund balances, this indicator can only be applied to private institutions.

As shown in figure 2, the ratio for private four-year colleges has dropped consistently since 1974. Although 17 percent of those colleges experienced steadily increasing ratios, the overall trend was downward.

The ratio for private universities dropped noticeably after the first period but held stable at a reduced level after the second. The indicator for the two-year colleges dropped after the first period but by 1978 increased beyond the 1974 level. Not surprisingly, the relative changes in reserves exhibited in figure 2 by private two-year and four-year colleges are similar to the relative changes in current fund ratios shown by these same colleges in figure 1.

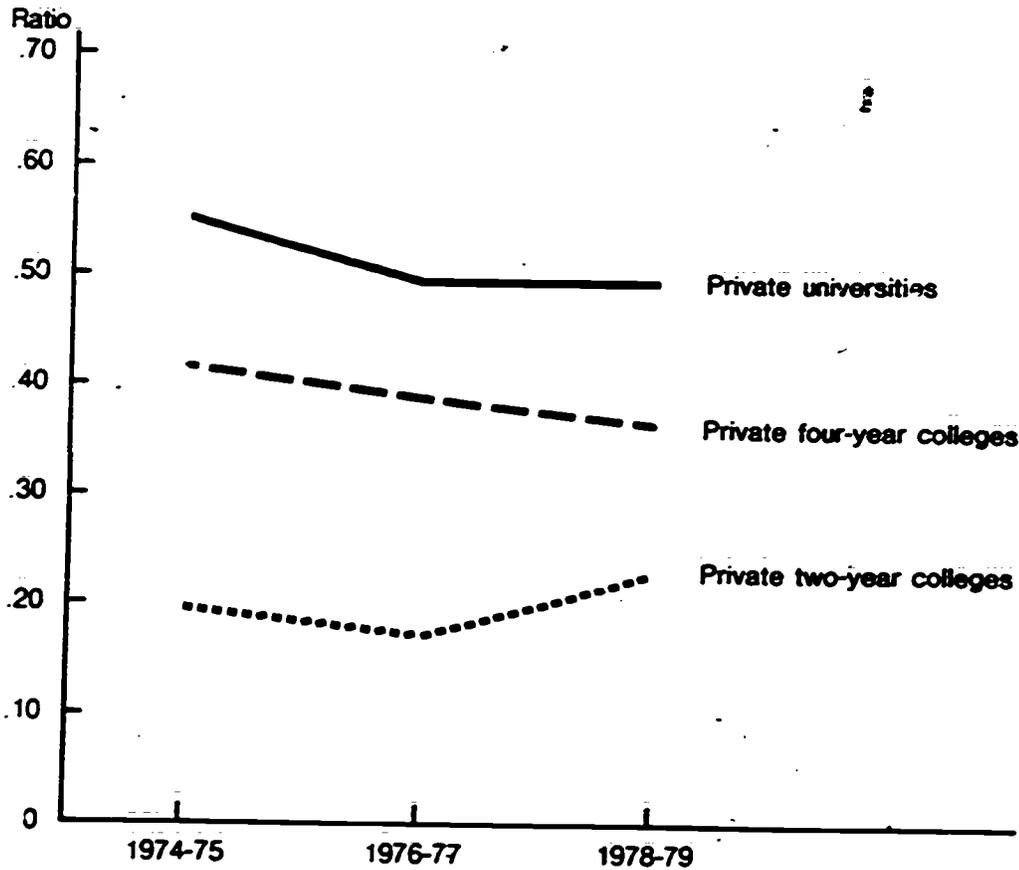
Because this ratio's denominator is educational and general expenditures plus mandatory transfers, the statistic represents the proportion of a year's expenditures held in these two fund balances. Thus, in 1978-79, private universities held reserves equal to 50 percent of one year's expenditures; private four-year colleges held 36 percent; and private two-year colleges, 23 percent.

This indicator grows as the result of budget surpluses and transfers to quasi-endowment and shrinks because of budget growth, budget deficits, or transfers from quasi-endowment. In addition to showing the availability of funds for contingencies (or the amount of debt, when negative), this indicator also reflects the financial result of past performance. Of all the indicators, this one most closely approximates a simple description of general financial health for private institutions.

Estimated Risk

The following statistics estimate the degree to which an institution is exposed

Fig. 2. Trends in the Ratio of Available Fund Balances to Operating Expenses*



* $\frac{\text{current fund balance} + \text{quasi-endowment fund balance}}{\text{educational and general expenditures} + \text{mandatory transfers}}$

Institutional Category	Number	Institutions with Ratios	
		Increasing > 5% Each Period	Decreasing > 5% Each Period
Private universities	37	0	14
Private four-year colleges	914	155	210
Private two-year colleges	243	91	30

to financial risk and, consequently, the degree to which additional financial resources might be needed. Risk is a function of the uncertainties of such external factors as inflation, enrollment, and income from gifts. Risk exposure indicates an institution's preparation for uncertain fluctuations in revenues and expenditures.

1. *Liabilities-to-revenues ratio*

$$\frac{\text{current fund liabilities}}{\text{current fund revenues}}$$

This indicator measures an institution's relative ability to meet its commitments in the short run. The higher the ratio, the relatively more into debt the institution has fallen.

As table A indicates, only very slight changes have occurred in institutional debt ratios. For public universities, public two-year colleges, and private four-year colleges, the ratios dropped after the first two-year period but by 1978 grew beyond the 1974 level. The relative debt position worsened slightly at public four-year colleges (although almost one-fourth of these institutions reported steadily decreasing ratios) and improved at private two-year colleges.

Table A: Ratio of Liabilities to Revenues

<u>Institutional Category</u>	<u>N</u>	<u>1974-75</u>	<u>1976-77</u>	<u>1978-79</u>	<u>N with Ratios Increasing >5% Each Period</u>	<u>N with Ratios Decreasing >5% Each Period</u>
Public universities	51	0.104	0.097	0.107	7	8
Public four-year colleges	363	0.099	0.099	0.100	26	82
Public two-year colleges	900	0.155	0.151	0.167	188	113
Private universities	37	0.168	0.156	0.161	5	8
Private four-year colleges	914	0.171	0.169	0.184	201	200
Private two-year colleges	243	0.324	0.312	0.277	122	61

2. *Fixed proportion of the budget*

$$\frac{\text{tenured faculty} \times \text{total faculty compensation} + \text{annual debt service}}{\text{total faculty}} \div \text{current fund revenues}$$

This ratio shows the proportion of revenues used for expenses over which the institution has limited discretion. The degree of flexibility in managing budgeted expenses is considered a measure of estimated long-term financial risk. Therefore, an increase in the ratio indicates lessened flexibility.

As shown in figure 3, the proportion of the budget that is fixed has been regularly contracting at private two-year and four-year colleges and expanding at public two-year and four-year colleges. (Nevertheless, proportionately twice as many public two-year colleges had steadily decreasing, rather than steadily increasing, ratios.) This ratio for the public universities has fluctuated, but by 1978, it had remained above the 1974 level, as had the ratio for private universities.

Thus, the private colleges have increased their budget flexibility and reduced their long-term financial risk. On average, the public institutions as well as private universities have limited their budget flexibility.

To a major extent, these trends may reflect changing tenure practices, particularly at private institutions. For a more complete discussion of changing tenure practices, see HEP report #48, Tenure Practices at Four-Year Colleges and Universities (1980).

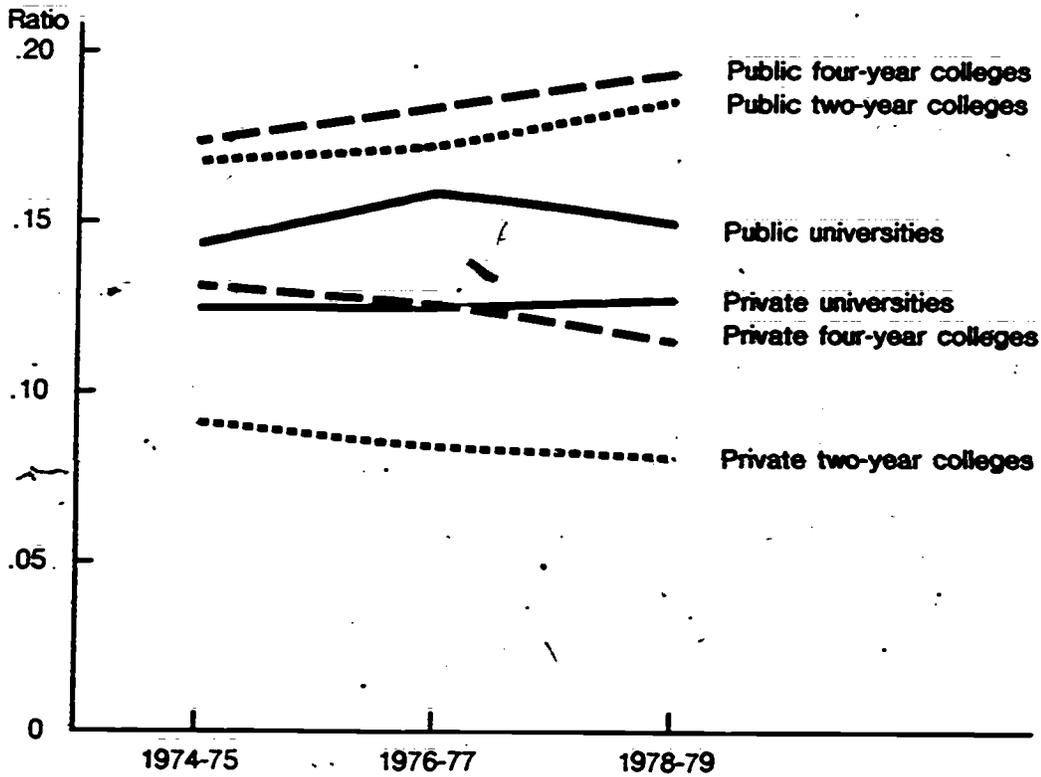
3. *Ratio of applications to new enrollments*

$$\frac{\text{undergraduate degree-credit applications}}{\text{total first-time freshmen} + \text{new transfers}}$$

This statistic shows the number of applications received during the year for each new student who matriculated. The higher this ratio becomes, the lower is the probable impact upon the institution of the expected decline in the number of potential college students.

Table B shows that the indicators for public and private four-year colleges and private universities have increased consistently over the three academic years under

Fig. 3. Trends in the Ratio of Fixed Commitments to Revenues



$$\frac{\text{tenured faculty} \times \text{total faculty compensation} + \text{annual debt service}}{\text{Total faculty current fund revenues}}$$

Institutional Category	Number	Institutions with Ratios	
		Increasing > 5% Each Period	Decreasing > 5% Each Period
Public universities	51	8	7
Public four-year colleges	363	74	54
Public two-year colleges	900	71	144
Private universities	37	1	5
Private four-year colleges	914	73	248
Private two-year colleges	243	30	122

study. The public university ratio dropped slightly in 1978 from 1976 but was still about 10 percent higher than its ratio in 1974. Ratios for the two-year colleges, both public and private, decreased after the first period but increased after the second, although not to previous levels. Further, more than one-fifth of public two-year colleges experienced growth in this ratio of at least 5 percent during each period.

Table B: Ratio of Applications to New Enrollment

<u>Institutional Category</u>	<u>N</u>	<u>1974-75</u>	<u>1976-77</u>	<u>1978-79</u>	<u>N with Ratios Increasing >5% Each Period</u>	<u>N with Ratios Decreasing >5% Each Period</u>
Public universities	51	2.290	2.520	2.512	7	1
Public four-year colleges	363	2.429	2.567	2.631	70	28
Public two-year colleges	900	3.990	2.944	3.001	191	104
Private universities	37	2.726	2.846	3.107	10	1
Private four-year colleges	914	2.449	2.560	2.618	184	51
Private two-year colleges	243	1.853	1.644	1.711	0	0

The four-year colleges and universities have an increasing pool of potential students to choose from, whereas two-year colleges have a declining pool relative to the size of their freshman classes. Public two-year colleges, however, have a much larger applicant group to draw from, largely because of open admissions policies.

Much of the apparently increasing pool for universities and four-year colleges may be explained by students sending out an increasing number of applications. While it is not possible to distinguish between increasing numbers of applicants and an increasing number of applications per applicant, the trends in this statistic may be helpful for institutions wishing to measure changes in their applicant pools relative to national trends.

4. *Ratio of new enrollment to FTE enrollment*

$$\frac{\text{total first-time freshmen + new transfers}}{\text{total FTE enrollment}}$$

This statistic is also a predictor of the immediacy of the effects of the anticipated decline in the number of potential students of traditional college age. As the ratio decreases (i.e., the less dependent an institution becomes upon a high proportion of freshmen revenues), the more protected is the institution from the immediate effects of any decline. Such an institution has more time to make any necessary adjustments in other areas, such as expenditures.

As can be seen in table C, there has been little if any change in the ratios at universities and four-year colleges. However, at both public and private two-year

Table C: Ratio of New Enrollment to FTE Enrollment

<u>Institutional Category</u>	<u>N</u>	<u>1974-75</u>	<u>1976-77</u>	<u>1978-79</u>	<u>N with Ratios Increasing >5% Each Period</u>	<u>N with Ratios Decreasing >5% Each Period</u>
Public universities	51	0.296	0.279	0.296	6	1
Public four-year colleges	363	0.319	0.314	0.313	45	16
Public two-year colleges	900	0.381	0.492	0.505	193	132
Private universities	37	0.237	0.237	0.224	4	3
Private four-year colleges	914	0.317	0.315	0.317	88	26
Private two-year colleges	243	0.530	0.540	0.551	0	30

colleges, where about half the full-time student body tends to change annually, the ratios have increased each year. The nature of two-year colleges would generally make them more vulnerable to the effects of a decline in the number of potential students and, therefore, the results more difficult to interpret. It is interesting to note, however, that similar proportions of public two-year colleges had steadily increasing and steadily decreasing ratios of applications to new enrollment as they did ratios of new enrollment to FTE enrollment.

Changes Affecting Financial Resources

The following indicators measure change in various factors that directly affect an institution's financial resources.

1. *Ratio of receivables to revenues*

$$\frac{\text{student accounts receivable}}{\text{tuition revenues} + \text{auxiliary revenues}}$$

This ratio assesses the change in an institution's relative ability to collect revenue from students. An increasing ratio shows an increasing proportion of student billings that is becoming uncollectible, either because the institution has become less able to collect or because the students have become less able to pay.

This indicator may also vary if federal student aid policies and procedures are delayed or become more uncertain. Institutions may admit students with the expectation that the students would receive aid. If late regulations are more restrictive than originally anticipated, these student bills may not be paid.

Table D: Ratio of Student Accounts Receivable to Student Revenues

<u>Institutional Category</u>	<u>N</u>	<u>1974-75</u>	<u>1976-77</u>	<u>1978-79</u>	<u>N with Ratios Increasing >5% Each Period</u>	<u>N with Ratios Decreasing >5% Each Period</u>
Public universities	51	0.039	0.033	0.035	7	13
Public four-year colleges	363	0.059	0.055	0.057	66	67
Public two-year colleges	900	0.034	0.036	0.038	96	123
Private universities	37	0.051	0.048	0.050	7	7
Private four-year colleges	914	0.038	0.034	0.038	215	189
Private two-year colleges	243	0.020	0.014	0.015	61	61

In the aggregate, the ratios in table D have fallen slightly between 1974 and 1976 and risen slightly between 1976 and 1978. The exception is among public two-year colleges, where the ratios have continued to rise although only slightly.

This indicator shows no great overall change in the institutions' ability to collect their debts. However, institutions should find these figures useful for comparing their own performance with national trends.

2. *Dormitory occupancy rate*

$$\frac{\text{institutionally owned living space rented c}}{\text{all institutionally owned living}} \quad \text{all term}$$

Since dormitories represent a large fixed-cost . . . tion for many institutions, unfilled dormitory space would indicate that revenue normally allocated to educational and general purposes may be diverted to cover dormitory expenses.

Table E: Dormitory Occupancy Rates

<u>Institutional Category</u>	<u>N</u>	<u>1974-75</u>	<u>1976-77</u>	<u>1978-79</u>	<u>N with Ratios Increasing >5% Each Period</u>	<u>N with Ratios Decreasing >5% Each Period</u>
Public universities	50	93%	93%	94%	2	0
Public four-year colleges	314	86	89	90	44	9
Public two-year colleges	276	85	86	87	21	0
Private universities	36	92	93	95	1	0
Private four-year colleges	812	92	91	91	27	0
Private two-year colleges	213	72	77	82	30	0

* Of the total population of 2,508 institutions, 807 own no dormitory space.

For the most part, occupancy rates have remained fairly stable or have increased slightly (see table E), eliminating the possibility of increased vacant dormitory space as a potential financial drain.

3. *Ratio of salaries to expenditures*

$$\frac{\text{salaries and wages}}{\text{current fund expenditures + mandatory transfers}}$$

This indicator reflects the proportion of expenditures used to pay faculty and staff salaries. When revenues fall, institutions may tend to cut back on nonsalary expenses; thus a ratio that increases over time may signify the beginning of financial difficulty.

According to figure 4, the ratios for public institutions in the aggregate increased between 1974 and 1978, although the ratios for public two-year and public four-year institutions dipped halfway through the period. Nevertheless, larger proportions of public two-year and four-year colleges had steadily decreasing, rather than increasing, ratios. The trend at private institutions is less discernible, although private universities and private two-year colleges show decreasing proportions of personnel expenditures over the two periods.

These statistics seem to indicate the increasing tendency of public institutions to receive public appropriations requiring budgetary stringency and their tendency--at least during the years surveyed here--to avoid reducing personnel as a response to revenue shortfalls. Figure 3 corroborates this hypothesis by showing the decreasing flexibility of public institutions in terms of tenured faculty salary commitments.

Further analysis is needed to support these contentions. Future work will attempt to determine whether increases in the ratio of salaries and wages to total expenditures are related to constant dollar decreases in total unrestricted revenue support.

Changes in Nonfinancial Resources

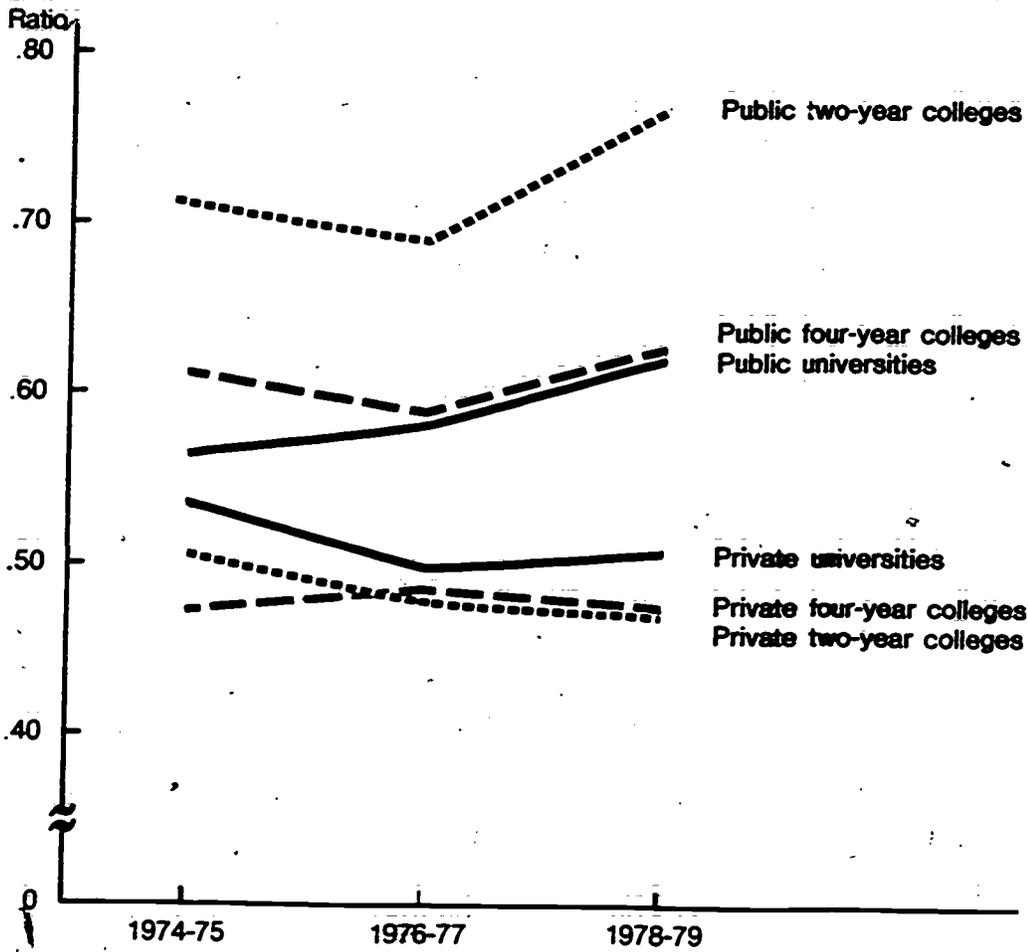
1. *Continuing education enrollment*

Continuing education enrollments are considered to reflect an institution's link to the community--the greater the enrollment level, the stronger the link. Consequently, changes in enrollment can signal changes in an important resource.

In the aggregate, public institutions experienced substantial growth in not-for-credit enrollments between 1974 and 1978: 166 percent at four-year colleges, 90 percent at universities, and 45 percent at two-year colleges (table F).

Not-for-credit enrollments at private universities increased from modest numbers in 1974 by more than one-quarter during the first period and by nearly 300

Fig. 4. Trends in the Ratio of Salaries and Wages to Total Expenditures*



salaries and wages

current fund expenditures + mandatory transfers

<i>Institutional Category</i>	<i>Number</i>	<i>Institutions with Ratios</i>	
		<i>Increasing > 5% Each Period</i>	<i>Decreasing > 5% Each Period</i>
Public universities	51	3	3
Public four-year colleges	363	10	48
Public two-year colleges	900	61	108
Private universities	37	0	4
Private four-year colleges	914	88	82
Private two-year colleges	243	0	61

percent by the second period. Private four-year colleges, however, experienced a net gain of 5 percent after a 7 percent loss in 1976. Not-for-credit enrollment at private two-year colleges grew by 85 percent between 1974 and 1976, but declined enough by 1978 to fall just below the 1974 level.

Table F: Continuing Education Enrollment

Institutional Category	N	Enrollment in 1974	% Change		N with % Change Increasing >5% Each Period	N with % Change Decreasing >5% Each Period
			1974-76	1974-78		
Public universities	51	113,600	46.5	89.5	29	2
Public four-year colleges	363	83,700	102.1	166.5	107	13
Public two-year colleges	900	1,311,000	31.3	45.4	169	30
Private universities	37	13,100	27.6	294.3	16	3
Private four-year colleges	914	157,600	-6.6	5.1	107	24
Private two-year colleges	243	5,300	84.6	-1.1	0	30

This indicator appears to be fairly volatile, particularly for private institutions. More information is needed on institutional commitment to offering continuing education and the impact of local tax initiatives to assess these data adequately.

2. FTE Faculty

Frequently, reductions in academic programs are almost immediately followed by reductions in the number of full-time-equivalent faculty. Thus, a decrease in faculty would reflect a decrease in student choice and options for different studies.

As table G shows, the level of FTE faculty has generally fluctuated. The number of faculty on average has increased moderately or not at all and there have been no decreases. Thus, by this measure, there has been no apparent reduction in academic options.

Table G: FTE Faculty

Institutional Category	N	Faculty in 1974	% Change		N with % Change Increasing >5% Each Period	N with % Change Decreasing >5% Each Period
			1974-76	1974-78		
Public universities	51	35,800	3.6	6.8	6	0
Public four-year colleges	363	102,300	.8	3.9	74	4
Public two-year colleges	900	113,400	15.0	17.9	375	0
Private universities	37	15,000	3.0	3.0	7	0
Private four-year colleges	914	73,800	7.8	11.1	150	18
Private two-year colleges	243	8,000	5.7	10.3	91	30

Table 1

Trends in Selected Characteristics of Selected Colleges and Universities:
Total Institutions (N=2,508)

Characteristics	1974-75	1976-77		1978-79	
	Amount	Amount	% Change from 1974-75	Amount	% Change from 1976-77
<u>Finances (dollars in thousands)</u>					
Current fund assets	5,431,336	6,514,395	19.9	7,746,264	18.9
Current fund liabilities	2,691,281	3,173,295	17.9	3,858,347	21.6
Debt service payments	796,055	916,127	15.1	998,053	8.9
Quasi-endowment fund balance	1,687,265	1,880,610	11.5	2,086,543	11.0
Net student accounts receivable	346,096	390,774	12.9	476,489	21.9
Salaries and wages	10,979,419	13,263,426	20.8	15,687,311	18.3
<u>Dormitory occupancy rate</u> (in percentages)	87	88	1.2	89	1.3
<u>Enrollment and Faculty (rounded to the nearest hundred)</u>					
Not-for-credit enrollments	1,684,300	2,231,000	32.5	2,567,600	15.1
New transfer students	685,800	751,300	9.5	785,700	4.6
Undergraduate applications	5,897,400	6,474,800	9.8	6,672,000	3.0
Full-time-equivalent faculty	348,300	374,100	7.4	384,500	2.8

BASIC REPORT TABLES

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Table 2
Trends in Selected Characteristics of Selected Colleges and Universities:
Public Institutions (N=1,314)

Characteristics	1974-75 Amount	1976-77		1978-79	
		Amount	% Change from 1974-75	Amount	% Change from 1976-77
<u>Finances (dollars in thousands)</u>					
Current fund assets	3,489,780	4,355,846	24.8	5,167,557	18.6
Current fund liabilities	1,534,603	1,852,705	20.7	2,180,605	17.7
Debt service payments	515,870	620,350	20.3	656,607	5.8
Quasi-endowment fund balance	144,790	1,799	29.7	206,007	9.7
Net student accounts receivable	171,796	200,255	16.7	223,763	11.7
Salaries and wages	7,921,695	9,637,145	21.7	11,469,009	19.0
<u>Dormitory occupancy rate</u> (in percentages)					
	86	88	2.3	89	1.1
<u>Enrollment and Faculty (rounded to the nearest hundred)</u>					
Not-for-credit enrollments	1,508,300	2,057,300	36.4	2,344,900	14.0
New transfer students	578,000	632,600	9.4	656,400	3.8
Undergraduate applications	4,774,800	5,273,700	10.4	5,365,300	1.7
Full-time-equivalent faculty	251,500	270,700	7.6	278,300	2.8

Table 3
Trends in Selected Characteristics of Selected Colleges and Universities:
Private Institutions (N=1,194)

Characteristics	1974-75	1976-77		1978-79	
	Amount	Amount	% Change from 1974-75	Amount	% Change from 1976-77
<u>Finances (dollars in thousands)</u>					
Current fund assets	1,941,556	2,158,550	11.2	2,578,707	16.3
Current fund liabilities	1,156,677	1,320,589	14.2	1,677,743	27.0
Debt service payments	280,185	295,777	5.6	341,446	15.4
Quasi-endowment fund balance	1,542,475	1,692,808	9.5	1,880,536	11.1
Net student accounts receivable	174,300	190,519	9.3	252,727	32.7
Salaries and wages	3,057,724	3,626,281	18.6	4,218,302	16.3
<u>Dormitory occupancy rate</u> (in percentages)					
	88	88	0	89	1.1
<u>Enrollment and Faculty (rounded to the nearest hundred)</u>					
Not-for-credit enrollments	176,100	173,700	-1.3	222,700	28.2
New transfer students	107,900	118,800	10.1	129,300	8.9
Undergraduate applications	1,122,600	1,201,100	7.0	1,306,700	8.8
Full-time-equivalent faculty	95,800	103,400	6.9	106,200	2.7

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Table 4

Trends in Selected Characteristics of Selected Colleges and Universities:
Public Universities (N=51)

Characteristics	1974-75 Amount	1976-77		1978-79	
		Amount	% Change from 1974-75	Amount	% Change from 1976-77
<u>Finances (dollars in thousands)</u>					
Current fund assets	556,719	638,380	14.7	795,348	24.6
Current fund liabilities	266,154	302,939	13.8	371,407	22.6
Debt service payments	99,394	133,242	34.1	121,629	-8.7
Quasi-endowment fund balance	107,342	123,496	15.0	129,755	5.1
Net student accounts receivable	32,825	32,741	-.3	37,092	13.3
Salaries and wages	1,449,669	1,801,482	24.3	2,138,094	18.7
<u>Dormitory occupancy rate</u> (in percentages)	93	93	0	94	.6
<u>Enrollment and Faculty (rounded to the nearest hundred)</u>					
Not-for-credit enrollments	113,600	166,400	46.5	215,200	29.3
New transfer students	66,000	66,500	.6	70,000	5.4
Undergraduate applications	405,000	431,000	6.4	453,800	5.3
Full-time-equivalent faculty	35,800	37,100	3.6	38,200	3.1

Table 5

Trends in Selected Characteristics of Selected Colleges and Universities:
Private Universities (N=37)

Characteristics	1974-75 Amount	1976-77		1978-79	
		Amount	% Change from 1974-75	Amount	% Change from 1976-77
<u>Assets (dollars in thousands)</u>					
Plant fund assets	321,905	370,140	15.0	452,014	22.1
Plant fund liabilities	186,702	209,410	12.2	254,848	21.7
Service payments	28,022	36,648	30.8	39,415	7.6
Endowment fund balance	386,725	415,928	7.6	483,496	16.2
Student accounts receivable	36,939	41,477	12.3	51,510	24.2
Salaries and wages	582,028	655,451	12.6	783,425	19.5
<u>Library occupancy rate (percentages)</u>					
	92	93	.8	95	2.4
<u>Enrollment and Faculty (rounded to the nearest hundred)</u>					
Non-credit enrollments	13,100	16,800	27.6	51,800	209.0
Transfer students	14,100	13,200	-6.9	12,900	-1.7
Graduate applications	142,900	151,200	5.8	160,500	6.2
Time-equivalent faculty	15,000	15,500	3.0	15,500	0

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Table 6

Trends in Selected Characteristics of Selected Colleges and Universities:
Public Four-Year Colleges (N=363)

Characteristics	1974-75 Amount	1976-77		1978-79	
		Amount	% Change from 1974-75	Amount	% Change from 1976-77
<u>Finances (dollars in thousands)</u>					
Current fund assets	1,287,875	1,677,824	30.3	2,050,353	22.2
Current fund liabilities	565,905	682,037	20.5	767,051	12.5
Debt service payments	196,675	234,796	19.4	251,192	7.0
Quasi-endowment fund balance	25,714	50,051	94.6	56,151	12.2
Net student accounts receivable	106,054	121,799	14.8	136,745	12.3
Salaries and wages	3,448,548	3,997,984	15.9	4,749,482	18.8
<u>Dormitory occupancy rate</u> (in percentages)	86	89	3.7	90	1.6
<u>Enrollment and Faculty (rounded to the nearest hundred)</u>					
Not-for-credit enrollments	83,700	169,200	102.1	223,100	31.9
New transfer students	210,300	223,500	6.3	224,800	.6
Undergraduate applications	1,369,400	1,496,700	9.3	1,525,600	1.9
Full-time-equivalent faculty	102,300	103,200	.8	106,300	3.0

Table 7

Trends in Selected Characteristics of Selected Colleges and Universities:
Private Four-Year Colleges (N=914)

Characteristics	1974-75	1976-77		1978-79	
	Amount	Amount	% Change from 1974-75	Amount	% Change from 1976-77
<u>Finances (dollars in thousands)</u>					
Current fund assets	1,259,223	1,385,896	10.1	1,644,461	18.7
Current fund liabilities	864,073	980,455	13.5	1,279,045	30.5
Debt service payments	234,894	236,045	.5	276,011	16.9
Quasi-endowment fund balance	1,128,073	1,248,686	10.7	1,365,292	9.3
Net student accounts receivable	132,710	144,714	9.0	195,609	35.2
Salaries and wages	2,309,676	2,772,023	20.0	3,203,718	15.6
<u>Dormitory occupancy rate</u> (in percentages)	92	91	-.7	91	0
<u>Enrollment and Faculty (rounded to the nearest hundred)</u>					
Not-for-credit enrollments	157,600	147,100	-6.6	165,600	12.5
New transfer students	83,700	94,700	13.1	104,100	10.0
Undergraduate applications	868,400	924,000	6.4	1,009,100	9.2
Full-time-equivalent faculty	73,800	79,500	7.8	82,000	3.1

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Table 8

Trends in Selected Characteristics of Selected Colleges and Universities:
Public Two-Year Colleges (N=900)

Characteristics	1974-75 Amount	1976-77		1978-79	
		Amount	% Change from 1974-75	Amount	% Change from 1976-77
<u>Finances (dollars in thousands)</u>					
Current fund assets	1,645,187	2,039,642	24.0	2,321,856	13.8
Current fund liabilities	702,545	867,730	23.5	1,042,147	20.1
Debt service payments	219,801	252,312	14.8	283,786	12.5
Quasi-endowment fund balance	11,733	14,252	21.5	20,101	41.0
Net student accounts receivable	32,917	45,715	38.9	49,926	9.2
Salaries and wages	3,023,478	3,837,679	26.9	4,581,433	19.4
<u>Dormitory occupancy rate (in percentages)</u>					
	85	86	1.4	87	1.6
<u>Enrollment and Faculty (rounded to the nearest hundred)</u>					
Not-for-credit enrollments	1,311,000	1,721,700	31.3	1,906,500	10.7
New transfer students	301,600	342,600	13.6	361,600	5.5
Undergraduate applications	3,000,300	3,346,000	11.5	3,385,900	1.2
Full-time-equivalent faculty	113,400	130,500	15.0	133,700	2.5

Table 9

Trends in selected Characteristics of Selected Colleges and Universities:
Private Two-Year Colleges (N=243)

Characteristics	1974-75 Amount	1976-77		1978-79	
		Amount	% Change from 1974-75	Amount	% Change from 1976-77
<u>Finances (dollars in thousands)</u>					
Current fund assets	360,427	402,514	11.7	482,232	19.8
Current fund liabilities	105,903	130,724	23.4	143,850	10.0
Debt service payments	17,269	23,084	33.7	26,019	12.7
Quasi-endowment fund balance	27,677	28,197	1.9	31,747	12.6
Net student accounts receivable	4,651	4,327	-7.0	5,607	29.6
Salaries and wages	166,020	198,807	19.7	231,159	16.3
<u>Dormitory occupancy rate</u> (in percentages)	72	77	5.7	82	69
<u>Enrollment and Faculty (rounded to the nearest hundred)</u>					
Not-for-credit enrollments	5,300	9,800	84.6	5,300	-46.4
New transfer students	10,000	10,900	9.1	12,200	12.0
Undergraduate applications	111,300	125,900	13.1	137,000	8.9
Full-time-equivalent faculty	8,000	8,400	5.7	8,800	4.3

Table 10

Institutional Loan Defaults or Moratoriums, 1978-79,
by Selected Institutional Characteristics

Institutional Characteristics	Total Number of Institutions	Percent of Total with Defaults on Federally Guaranteed Loans	Percent of Total with Sinking Fund Defaults
Total institutions	2,508	3.6	2.0
Public institutions	1,314	3.5	.8
Universities	51	2.0	0
Four-year colleges	363	5.2	2.8
Two-year colleges	900	2.9	.1
Private institutions	1,194	3.7	3.1
Universities	37	0	0
Four-year colleges	914	4.8	4.0
Two-year colleges	243	0	0

Table 11
**Trends in the Ratio of Current Fund Assets
to Current Fund Liabilities**

Institutional Category	1974-75	1976-77	1978-79
Public universities	2.066	2.094	2.125
Public four-year colleges	2.276	2.460	2.673
Public two-year colleges	2.337	2.347	2.225
Private universities	1.724	1.768	1.774
Private four-year colleges	1.461	1.416	1.289
Private two-year colleges	3.403	3.079	3.352

Table 12
**Trends in the Ratio of Available Fund Balances
to Operating Expenses**

Institutional Category	1974-75	1976-77	1978-79
Public universities	0.185	0.207	0.207
Public four-year colleges	0.102	0.107	0.122
Public two-year colleges	0.147	0.144	0.153
Private universities	0.556	0.493	0.496
Private four-year colleges	0.414	0.386	0.364
Private two-year colleges	0.195	0.172	0.231

Table 13
Trends in the Ratio of Fixed Commitments
to Current Fund Revenues

Institutional Category	1974-75	1976-77	1978-79
Public universities	0.144	0.159	0.150
Public four-year colleges	0.173	0.183	0.193
Public two-year colleges	0.168	0.172	0.186
Private universities	0.125	0.125	0.128
Private four-year colleges	0.131	0.126	0.116
Private two-year colleges	0.092	0.084	0.081

Table 14
Trends in the Ratio of Salaries and Wages
to Total Expenditures

Institutional Category	1974-75	1976-77	1978-79
Public universities	0.565	0.583	0.623
Public four-year colleges	0.610	0.591	0.628
Public two-year colleges	0.712	0.691	0.767
Private universities	0.536	0.499	0.508
Private four-year colleges	0.475	0.485	0.476
Private two-year colleges	0.504	0.479	0.473

APPENDIX A: Survey Instrument

**AMERICAN COUNCIL ON EDUCATION
ONE DUPONT CIRCLE
WASHINGTON, D. C. 20036**

HIGHER EDUCATION PANEL
(202) 833-4757

February 19, 1980

Dear Higher Education Panel Representative:

Enclosed is Higher Education Panel Survey No. 49, "Indicators of Financial Status of Colleges and Universities." The survey seeks trends in various items of information related to the financial condition of colleges and universities. Please note that the information being sought is not available through the Higher Education General Information Surveys (HEGIS).

The Office of Education is supporting a study by the American Council on Education and the National Association of College and University Business Officers. The enclosed survey is one element of the broader research effort. The purpose of the study is to assess the financial causes of strengths and weaknesses in colleges and universities, to determine the students potentially most affected by institutional hardship, and to identify feasible policy alternatives to remedy financial difficulties. The information collected by this survey will be merged with HEGIS data to generate specific financial indicators pertaining to various classes of institutions.

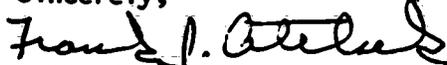
A special note to public institutions. We realize that public and private institutions require different styles of analysis to assess financial condition. For many public institutions, for example, deficits and carry forwards are prohibited by law, making questions about assets, liabilities, quasi-endowments and loan defaults seem inappropriate. However, we urge all institutions to supply all requested data where available. This will help the sponsors to select the most appropriate forms of analysis.

Based on field test results, we believe that responses to Part I will come from the business office and responses to Part II will come from the registrar. As usual, however, we leave that decision to you.

Please understand that responses from your institution will be held in strict confidence. As with all our surveys, the data you provide will be reported in summary fashion only and will not be identifiable with your institution. This survey is authorized by the National Science Foundation Act of 1950, as amended. Although you are not required to respond, your cooperation is needed to make the results comprehensive, reliable, and timely.

Please return the completed questionnaire to us by March 12, 1980. A prepaid return envelope has been enclosed for your convenience. If you have any problems or questions, please do not hesitate to telephone us collect at 202-833-4757.

Sincerely,



Frank J. Atelsek
Panel Director

NACUBO

National Association of College and University Business Officers
One Dupont Circle, Suite 510, Washington, D.C. 20036 • 202/861-2500

February 19, 1980

Dear Colleague:

Although I am normally hesitant to endorse a survey which threatens to add to the burden of already harassed business officers, NACUBO and the American Council on Education have become committed to a project which needs the data requested in this Higher Education Panel survey.

As part of a project funded by the U.S. Office of Education, we are preparing an analysis of the financial condition of institutions of higher education. We will merge the information with existing HEGIS data and will prepare a statement of trends in the financial resources and pressures at colleges and universities. HEGIS alone presents an incomplete picture.

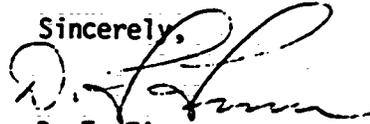
The analysis will provide the basis of a study of federal education policy options and will also be used to improve our financial condition self-assessment manuals. Broader comparative data are needed in these workbooks.

Please be assured that your responses will be held in strictest confidence. Results will be reported in an aggregate form only and will not be identifiable with any institution.

Your cooperation is requested and greatly appreciated. Please return the completed form to ACE by March 12, 1980.

Thank you.

Sincerely,



D. F. Finn
Executive Vice President

INSTRUCTIONS - PART I

Please note that data are requested for *every other year*.

These data are *not* reported in the Higher Education General Information Surveys (HEGIS).

FINANCES

1. Assets normally include both unrestricted and restricted (a) cash, (b) investments, (c) accounts receivable, (d) inventories, (e) prepaid expenses and deferred charges, and (f) interfund lending ("due from"). *Be sure to exclude institutional plant and loans receivable from students.*
2. Liabilities normally include (a) accounts payable; (b) accrued liability; (c) students' deposits; (d) deferred revenues; (e) notes payable due within one year; and (f) interfund liabilities ("due to"). *Be sure to exclude notes payable longer than one year.*
3. Include in debt service payments both interest and principal payments for the year specified *regardless* of the fund making the payments. *Do not include* interfund payments of interest or principal (i.e., mandatory transfers).
4. Quasi-endowment funds are funds functioning as endowment without restrictions on principal payout. This is a breakout of the HEGIS figure.
5. Use the audited end-of-year net amount. Billings for terms or semesters not yet begun and credit accounts should not be included in the audited amount.
6. Include only current fund salaries and wages which contributed to expenses listed as "current fund expenditures" on line B-19 of the HEGIS finance form. Include wages to students if appropriate.

AUXILIARY ENTERPRISES

7. This should be the percentage of capacity of all *institutionally owned* living spaces rented to students which are occupied for the fall term or semester.

LOAN DEFAULTS OR MORATORIUMS BY INSTITUTIONS

8. Indicate if any loan payments due from your institution to HEW or HUD were not paid in FY 1978-79.
9. Indicate if any payments due sinking funds were not paid in FY 1978-79.

American Council on Education
Higher Education Panel Survey No. 49:

INDICATORS OF FINANCIAL STATUS OF COLLEGES AND UNIVERSITIES

	<u>1974-75</u>	<u>1976-77</u>	<u>1978-79</u>
I. BASIC INSTITUTIONAL INFORMATION (TO BE COMPLETED BY THE BUSINESS OFFICE)			
<u>FINANCES</u>			
1. Amount of current fund assets	_____	_____	_____
2. Amount of current fund liabilities	_____	_____	_____
3. Annual debt service payments (all funds)	_____	_____	_____
4. Quasi-endowment fund balance	_____	_____	_____
5. Net student accounts receivable at end of fiscal year (excluding fall billings and credit accounts)	_____	_____	_____
6. Amount paid out in salaries and wages for the year	_____	_____	_____
<u>AUXILIARY ENTERPRISES</u>			
7. Dormitory occupancy rate (percent of capacity), fall term (if your institution owns no dorms, write "no dorms" in the space provided)	_____	_____	_____
<u>LOAN DEFAULTS OR MORATORIUMS BY INSTITUTIONS</u>			
8. Any defaults or moratoriums on federally guaranteed loans from HEW and HUD to your institution during FY 78-79?			() yes () no
9. Any sinking fund defaults during FY 78-79?			() yes () no

A note to public institutions:

For many public institutions, deficits and carry forwards are prohibited by law, making questions about assets, liabilities, and defaults seem inappropriate. However, to help determine the most appropriate forms of analysis, PLEASE provide as much of the requested data as possible.

Where no such funds exist (e.g., quasi-endowment funds), mark XXXX in the spaces provided. Where funds exist but cannot be distinguished from state or system funds, mark SYSTEM in the spaces provided. Please do not use NA--we never know if it means "not applicable" or "not available".

	<u>1974-75</u>	*	<u>1976-77</u>	*	<u>1978-79</u>
II. ENROLLMENT AND FACULTY INFORMATION (TO BE COMPLETED BY THE REGISTRAR)					
1. Number of not-for-credit enrollments as of October 15	_____		_____		_____
2. Number of new transfer students as of October 15	_____		_____		_____
3. Number of applications for under- graduate degree-credit enrollment during the school year	_____		_____		_____
4. Number of full-time-equivalent faculty as of October 15	_____		_____		_____

INSTRUCTIONS - PART II

* Please note that data are requested for *every other year*.

This questionnaire seeks data *not included* in the Higher Education General Information Surveys (HEGIS).

1. Count all students enrolled as of October 15 (or your institution's fall reporting date) for courses or instruction for which no credit is given. *Exclude* students counted by HEGIS opening fall enrollment.
2. Count all students enrolled as of October 15 (or your institution's fall reporting date) who were never before enrolled in your institution but who were previously enrolled in another institution of higher education.
3. Include completed applications only. Include applications received at any time for enrollment during each of the three years specified. *Exclude* inquiries.
4. Include full-time faculty, part-time faculty, faculty contributing their services, and administrators who teach part time who are employed as of October 15 (or your institution's fall reporting date).

Include faculty members with titles of professor, associate professor, assistant professor, instructor, lecturer, visiting professor, adjunct professor, or interim professor (or its equivalent).

To find the full-time equivalent for a part-time faculty member, divide that faculty member's load (in contact hours or course hours) by your institution's *expected* full-time load.

Thank you for your assistance.

Please return this form by March 12, 1980 to:

Higher Education Panel
American Council on Education
One Dupont Circle, N.W.
Washington, D.C. 20036

Please keep a copy of this survey for your records.

Person completing form

Name _____

Dept. _____

Phone _____

APPENDIX B: Methodology

The survey population included all institutions except those classified by the Carnegie Commission as major research universities, medical and other health profession schools, bible colleges and seminaries, art schools, law schools, and other specialized institutions. Table B-1 shows how the population was stratified.

Survey responses were weighted by the ratio of the number of institutions in the population to the number of institutions in the Panel that responded to the survey item. Missing values were replaced by the mean value reported for the appropriate year, separately for each stratification cell.

Usable responses were received from 68 percent of the 600 eligible Panel institutions (table B-2). The level of response was fairly uneven for this survey; the larger institutions in terms of enrollment and finances were more likely to respond, whereas the smaller institutions were less likely to respond. Many of the public institutions, primarily the two-year colleges, reported an inability to respond because they were part of a larger university system and hence maintained none of the requested financial records.

Readers should exercise caution in interpreting data from two-year colleges, particularly in the private sector, because of their relatively low response rates and their resultant high weights.

Table B-1

Stratification Design for Weighting

Strat Cell	Population (N=2,508)	Respondents (N=410)
Public universities	51	44
Private universities	37	27
Public black four-year colleges FTE > 3,000	13	7
Public nonblack four-year colleges FTE > 8,750	101	76
Private nonblack four-year colleges FTE > 8,750	13	7
Public two-year colleges FTE > 8,750	36	17
Public four-year colleges FTE 3,700-8,750	77	33
Public four-year colleges FTE < 3,700	172	20
Private four-year colleges FTE 2,000-8,750	130	29
Private four-year colleges FTE 1,000-2,000	267	30
Private four-year colleges FTE < 1,000	504	19
Public two-year colleges FTE 5,100-8,750	62	20
Public two-year colleges FTE 3,260-5,100	103	27
Public two-year colleges FTE 1,600-3,260	177	20
Public two-year colleges FTE < 1,600	522	26
Private two-year colleges	243	8

Table B-2

Comparison of Respondents and Nonrespondents
(in percentages)

Characteristic	Respondents (N=410)	Nonrespondents (N=190)	Response Rate
Total	100.0	100.0	68.2
Type and control			
Public universities	10.8	3.7	86.3
Private universities	6.6	4.2	77.1
Public four-year colleges	33.3	20.9	77.3
Private four-year colleges	20.8	19.9	69.1
Public two-year colleges	26.7	46.1	55.3
Private two-year colleges	2.0	5.2	44.4
FTE enrollment Fall 1977			
Under 1,000	10.3	23.6	48.3
1,000-4,999	38.6	42.9	65.8
5,000-9,999	34.0	22.0	76.8
10,000 and over	17.1	11.5	76.1
Total undergraduate enrollment Fall 1977			
Under 1,000	15.2	28.3	53.4
1,000-4,999	50.6	50.3	68.3
5,000-9,999	26.2	17.3	76.4
10,000 and over	8.0	4.2	80.5
Current fund revenues 1975-76			
Less than \$5.6 million	20.5	34.6	56.0
\$5.6 - 12.8 million	23.7	27.7	64.7
\$12.9 - 26.0 million	26.4	21.5	72.5
More than 26 million	29.3	16.2	79.5
Current fund expenditures 1975-76			
Less than \$5.6 million	20.5	35.1	55.6
\$5.6 - 12.8 million	24.2	28.3	64.7
\$12.9 - 26.0 million	26.7	21.5	72.7
More than \$26 million	28.6	15.2	80.1

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APPENDIX C: Reliability of Survey Estimates

Since the statistics presented in this report are based on a sample, they will differ somewhat from the figures which would have been obtained if a complete census had been taken using the same survey instrument, instructions, and procedures. As in any survey, the results are also subject to reporting and processing errors and errors due to nonresponse. To the extent possible, these types of errors were kept to a minimum by methods built into the survey procedures.

The standard error is primarily a measure of sampling variability, that is, the variations that might occur by chance because only a sample of the institutions is surveyed. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the standard error. The chances are about 90 out of 100 that the difference would be less than 1.65 times the standard error; about 95 out of 100 that the difference would be less than 1.96 times the standard error; and about 99 out of 100 that it would be less than 2.5 times as large. Thus, knowing the standard error permits us to specify a range within which we can have a stated confidence that a given estimate would lie if a complete census, rather than a sample survey, had been conducted. As an example, please refer to the estimated number of full-time-equivalent (FTE) faculty in 1978-79 at all institutions: 384,500. The standard error of the estimate is 4,675 which, when multiplied by 1.65, yields 7,714, or the half-length of the 90 percent confidence interval. Thus, the chances are about 90 out of 100 that a complete census would show the number of FTE faculty in 1978-79 at all institutions to be more than 376,786 and less than 392,214.

The following table shows 90 percent confidence intervals of selected survey estimates, by control of institution.

Table C-1

Ninety Percent Confidence Intervals of Selected Survey Estimates, 1978-79

Item	Total Institutions		Public Institutions		Private Institutions	
	Estimate	Confidence Interval +	Estimate	Confidence Interval +	Estimate	Confidence Interval +
<u>Finances (dollars in thousands)</u>						
Current fund assets	7,746,264	813,996	5,167,557	542,283	2,578,707	640,489
Current fund liabilities	3,858,347	273,878	2,180,605	203,321	1,677,743	185,539
Salaries and wages	15,687,311	540,820	11,469,009	462,146	4,218,302	785,826
<u>Enrollment and Faculty</u>						
(rounded to the nearest hundred)						
Undergraduate applications	6,672,000	413,137	5,365,300	398,658	1,306,700	110,879
FTE faculty	384,500	7,714	278,300	10,925	106,200	6,634

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