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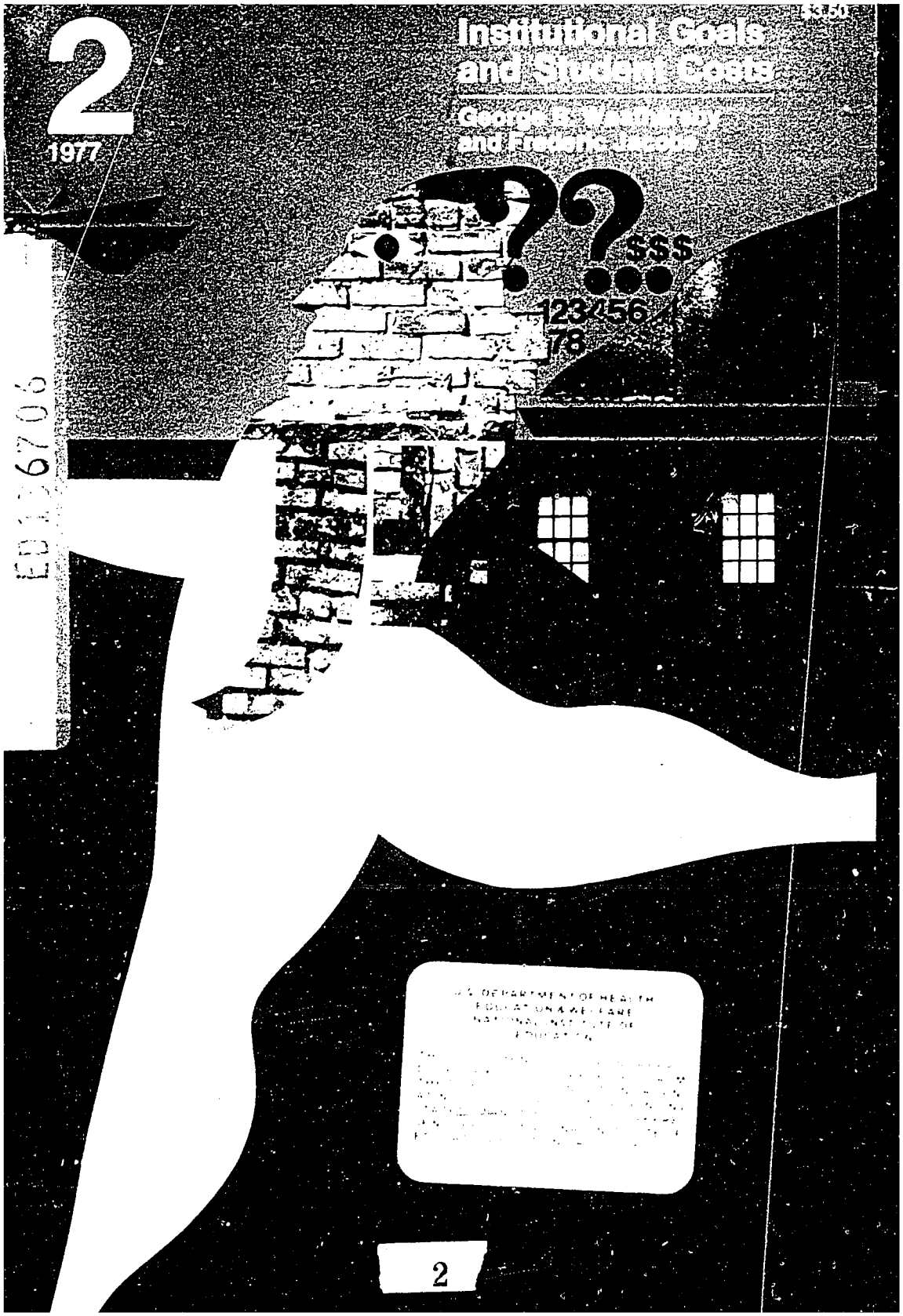
ABSTRACT

This monograph considers the relationship of institutional goals to student costs. The authors believe that student goals and institutional goals differ, and that as students perceive the extent of the differences, they will expect institutions to more closely relate their activities to the objectives of students. This goal adjustment has been prompted by a harsh economic climate and changing federal attitudes about the form of delivery systems to support higher education. Students are primary recipients of state and federal aid and have the choice of where to spend that aid. They are also becoming more selective about institutional program offerings. This would suggest a future of substantively different institutional accommodations than higher education has known in the past. However, the authors hypothesize that current incentives and decisionmaking structures of colleges tend to reflect a faculty and administrative concensus exclusive of student goals, which will probably widen the gap between institutional goals and student aspirations. This, in turn, will only lessen the student's willingness to pay the costs of meeting those institutional goals unless accommodations are made. (Editor)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Institutional Goals and Student Costs

George B. Weathersby
and Frederic Jacobs

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Foreword

This monograph considers the relationship of institutional goals to student costs. The authors believe that student goals and institutional goals differ, and that as students perceive the extent of the differences, they will expect institutions to more closely relate their activities to the objectives of students. This goal adjustment has been prompted by a harsh economic climate and changing federal attitudes about the form of delivery systems to support higher education. Students are primary recipients of state and federal aid and have the choice of where to spend that aid. They also are becoming more selective about institutional program offerings. This would suggest a future of substantively different institutional accommodations than higher education has known in the past. However, the authors hypothesize that current incentives and decisionmaking structures of colleges tend to reflect a faculty and administrative consensus exclusive of student goals, which will probably widen the gap between institutional goals and student aspirations. This, in turn, will only lessen the student's willingness to pay the costs of meeting these institutional goals unless accommodations are made. George B. Weathersby is professor of education and Frederic Jacobs is lecturer on education in the Harvard Graduate School of Education, Cambridge, Massachusetts.

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Introduction

In the last three centuries American higher education has grown enormously in the number of institutions and the number and diversity of students. Many forces shaped this growth: the desire to train ministers and to maintain highly differentiated religious denominations, private philanthropy, burgeoning youth populations and mandatory secondary schools, the expanding support of state and federal governments, and the national need for science and research, among many others. In the last 5 to 10 years, some of these forces have begun to reverse their direction: federal support for science and doctoral training has been radically reduced, the youth population is levelling off and will soon decline in total size, state and philanthropic sources of support are barely keeping up with inflation, and federal and, to a lesser extent, state policy is increasingly focussed on students as the vehicle of institutional financial support.

As these forces receded or changed direction, institutions found themselves with aspirations that cost more than available resources. Students were the most likely source of the desired additional resources. However, institutions had already gone to the well of student support by doubling the share of institutional costs paid by students. With soon-to-be-declining youth enrollments and continuing price inflation, the costs borne by the remaining students would have to increase at an even faster rate than in the past. These changes are consistent with the trend to make public policy decisions about student enrollment the vehicle of delivering public funds to institutions; however, the current incentives and decision-making structures of colleges and universities tend to reflect faculty and administrative consensus much more than student concerns. This will probably widen the gap between institutional goals and aspirations; it also will lessen the willingness of students to pay for the cost of meeting these institutional goals.

One possible, and we believe likely, consequence of this incongruity of who pays the piper and who calls the tune is the increased functional differentiation in the delivery of educational services. Currently, colleges and universities offer students many services: assessment of prior learning, academic counseling, career counseling, direct instruction, assessment of direct instruction, certification, and linkages to work on further education, among others. These services are

not made available individually to students; that is, generally a student cannot purchase only academic counseling or certification from a college or university. All of these services are provided as a package to enrolled students. However, each of these services could be provided directly to students (or anyone) by a functionally specialized organization or component of an existing college or university. In fact, there are examples of all of these services now being separately provided to individuals who are not enrolled in degree programs. In these cases, the cost borne by the student is only for the services he or she is purchasing, and the aspirations of organizations providing these services are in terms of the functional area of service. This is only one means of increasing the congruity between institutional goals and student costs.

It is difficult to predict with accuracy in the complex environment of higher and postsecondary education, but the demographic, financial, and public policy trends suggest that the divergence of institutional goals from the resources to meet these goals raises fundamental questions that go beyond the likely reluctance of students to pay an ever-increasing share of the costs. The ability to meet the educational needs of a wide range of students is one way higher educational institutions can increase the congruity of interests of those who pay for their services (students), those who decide what educational services should be made available (educational policy-makers), and those who receive and benefit from these educational services (society). With a future that is likely to be significantly different from the past, it is important for faculty, administrators, and friends of higher education to understand the relationships between the purposes and capacities of institutions and the needs of individuals.

A Widening Gap: Institutional Goals and Resources

During the past 15 years postsecondary education has undergone a remarkable expansion and contraction. No single decade in the history of American education produced more rapid growth of facilities, student enrollment, federal and state support, capital construction, and institutional programs and budgets than the period from 1960 to 1970. However, the first half of the 1970's has been a period of reconsideration and at times actual retrenchment due to a leveling of enrollment and greatly increased costs; the retrenchment has been made even more dramatic by its proximity to a period of expansion. This expansion and contraction has had serious consequences for institutions by placing stress on decision-making processes not designed or unable to respond to new, shifting social and economic conditions; furthermore, retrenchment has had adverse consequences for students who, as tuition payers, represent the major elastic component of institutional programs and budgets.

A series of conditions has created a gap between real institutional income and the income to achieve institutional goals. Available evidence suggests the gap will not shrink and may increase. To reduce and ultimately eliminate this gap, institutions need to adjust either expenditures or income or both, because long-term deficit spending in public and private postsecondary education cannot continue indefinitely. As institutional goals are modified, there will be an impact on student costs. This assertion is based on two assumptions: *first*, since student tuition is the source of institutional income with the greatest flexibility controllable by the institution, fiscal exigency affects students immediately, usually through increased tuition. *Second*, there are practical limits to tuition increases that exceed the rate of wage inflation because this would result in a decline in the purchasing power of family discretionary income for all other (noneducational) items and a corresponding decline in the demand for higher education.

While the goals students develop in pursuit of their studies and the goals institutions develop in offering educational services may exhibit varying degrees of congruity, institutional and student goals are inextricably linked through the means and magnitude of educational finance. Most students apply to only one institution and pay

whatever that institution charges, although some students might decide not to attend at all if price increases exceed expectations. Most colleges and universities derive the major part of their income from students or from governments in a manner directly proportioned to student enrollments. Inflation-driven cost increases, though not productivity-induced cost decreases, are understandably passed on directly to students; however, in the past 15 years, tuition has increased faster than all educational expenditures or consumer price indices, indicating that an increased proportion of the cost of meeting institutional goals is being borne by students. An alternative to price increases to students is for institutions to reduce expenditures.

We believe that this goal-income dilemma is not a one-time phenomenon. It appears to be a continuing pattern, whereby the costs of fulfilling institutional aspirations increase more rapidly than institutional endowment income and other independent resources, which in turn leads to price increases or reductions in services. This clearly affects students, since they unwittingly bear the cost of institutional ambition and are usually powerless to do anything about it. Furthermore, they are often unaware that the financial exigency resulting from the gap between aspirations and resources leads to a change in the nature and quality of services.

The present goal-income gap has resulted in an uncertain and unsteady state that will not end quickly. We are in a rather uncertain period in which there will be a great discrepancy between the aspirations of institutions and their income. Shrinking institutional resources will mean an increase in the percentage of expenditures for fixed costs and a decrease in the discretionary income available to institutions. Shrinking institutional resources will mean an increase in cost to students because students are the primary flexible source of income for institutions; as the gap becomes greater, there will be, as in the past, significant cost increases.

The present period of shrinking resources has direct and significant implications for student costs because present financial constraints demand institutional responses. This may have two probable impacts: (1) *For institutions* there will be an adjustment to a lower standard of living, mandatory cost cuts and increases in the percentage of expenditure for fixed costs, reduced aspirations, more narrowly defined mission, and emphasis on becoming excellent in specialized rather than generalized areas. (2) *For students* there will be an increase in costs, reduction in services and institutionally provided financial aid, alteration of the educational experience, greater institutional specialization and, thus, fewer choices.

An obvious way to avoid these consequences, which many deem undesirable, is to seek additional external funds, as evidenced in the institutional support requests made to governments and foundations, among others. However, the continuing growth in other social needs and the declining priority of educational funding has resulted in relatively few additional external funds being provided. The long-term trend is clear: institutional financial stability, if not survival, requires a more favorable balance between the costs of meeting institutional goals and the income derived from clients willing to support these activities. One proposed solution to this dilemma is to modify decision-making processes within institutions to enable them to determine more effectively their allocation of resources, and to establish institutional goals achievable with those resources.

Evidence of increased enrollments and overall growth in postsecondary education, along with increased expenses and charges to students, has led administrators and planners to scrutinize the institutional aspirations *and* income available to achieve them, and to view with growing concern the widening gap between goals and resources.

The following sections examine the goal-income dilemma, review its antecedents, relate its impact to student costs, and suggest a framework for dealing with the dilemma. The discussion takes the following form:

- An examination of the growth of postsecondary education, its increases in costs and prices, with particular emphasis on the impact of inflation on the cost of educational operations and services;
- A description and review of the assumptions and aspirations influencing American postsecondary education in the last 30 years;
- An overview of institutional decision-making processes emphasizing the means by which decisions relating to institutional objectives are made; and,
- The impact on students and costs to them of institutional ambition at a time of retrenchment.

Expansion and Inflation: The Financial Squeeze

The recent history of American postsecondary education has been characterized by expansion of resources and aspirations. For 15 years, with the exception of recessions in the early 1960's and early 1970's, educational expenditures have grown steadily both in real terms and as a percent of the Gross National Product (GNP). As long as this general growth in available resources continued, the expansion of institutional aspirations was consistent with increased access to students, for which there was some incentive to keep student prices down. Inflation is partially to blame for increased costs for construction and maintenance and for increased salaries and benefits. In fact, much of these costs has been shifted directly to students. Between 1961 and 1974, the Consumer Price Index (CPI) increased by 55 percent and the student Tuition Price Index (TPI) increased by 120 percent, faster than all other higher education cost indices (see Figure 1).* While costs have increased for all consumers, students as a group have been *severely* affected.

The tuition price increases pose a dilemma for those concerned with higher education policy. As Halstead points out: "The increase in TPI values represents the real loss of student purchasing power. While students still pay far less than the cost of their education, they now pay about twice as much in 1974 as they did in 1961 for the *same* resources expended by institutions" (Halstead 1975, p. 107). At the same time, the proportion of disposable family income devoted to higher education has remained approximately constant. Relative to their income, students and their families are paying the same proportionate share as they have in the past, but relative to the costs of the actual services received, students and their families are paying proportionately much more than 15 years ago.

However, tuition increases alone have not created the present dilemma: pressure has grown from within institutions to enlarge offerings, to increase the scope and diversity of programs and services, and to expand academic aspirations in general. Balderston (1974) believes

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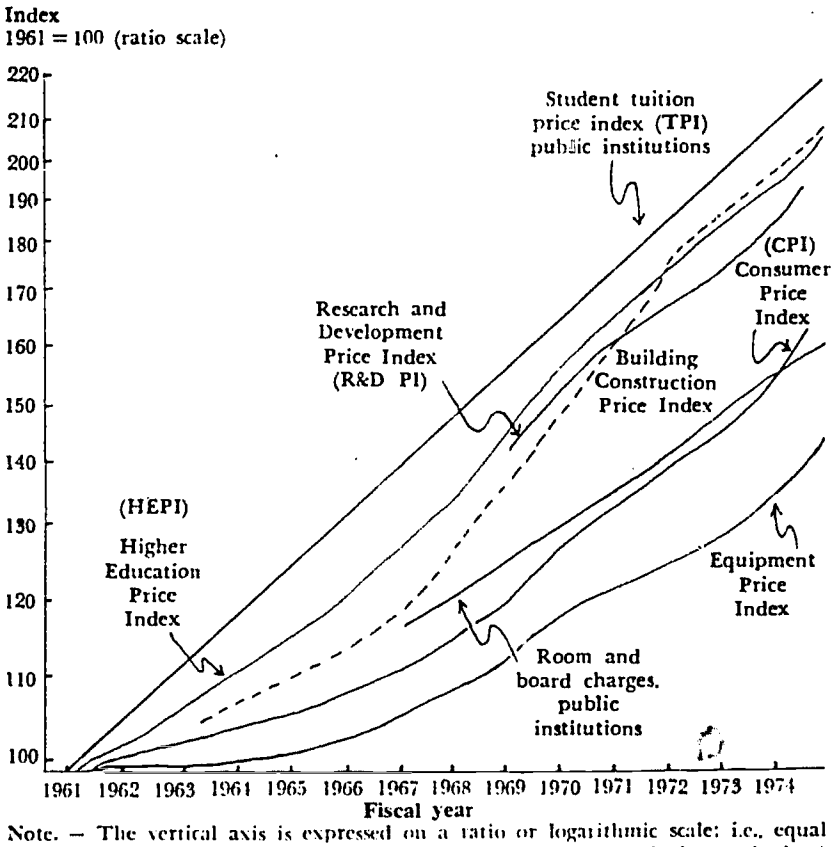
* The Consumer Price Index is calculated monthly by the Bureau of Labor Statistics. It represents the current price of purchasing a standard market basket of goods and services typically consumed by a household. The Tuition Price Index "reports change in the average resident undergraduate tuition for a constant dollar education expenditure input" (Halstead 1975, p. 107).

Figure 1. Comparison of trends in price change in higher education (current operations, research and development, building construction, equipment, student tuition, and room and board charges, with the Consumer Price Index, fiscal years 1961-74).



Note. — The vertical axis is expressed on a ratio or logarithmic scale; i.e., equal vertical distances reflect equal proportional (as distinguished from absolute) changes.
Source: Halstead, p. 10.

universities are "flexible and resilient organizations," but notes that ". . . conflicting demands on their resources and financial stringency have produced serious new stresses within them" (p. ix). Balderston also thinks the fiscal dilemma confronting universities is the most serious and dangerous component of the present situation. He attributes this in part to "expanded academic aspiration" resulting in institutional stress. He says, in describing this:

> To achieve this kind of stress, an institution established a number of new programs in areas of hot competition and recruited key faculty from a limited supply, ahead of enrollment growth. It developed new programs in areas of growing prestige—doctoral programs requiring heavy library or laboratory investment and substantial fellowship funds to enable successful competition for good students. This was done in many areas and moved the institution upward in academic status but also, inevitably, moved it outward toward the fiscal cliff" (Balderston 1974, p. 182).

This sense of "expansion of aspirations" has created an unprecedented "serious state of stress," which Balderston differentiates from the commonly used term "crisis." To Balderston crisis connotes "a peak of tension" rather than a sustained period of exigency.

Coupled with this institutional emphasis on expanded aspiration is the effect of inflation on educational costs. This can be seen by an examination of expenditures for current operations. Just as the Consumer Price Index provides an index for consumer costs, the Higher Education Price Index (HEPI) "reports the change in prices paid by institutions for a fixed group of inputs purchased for educational and general operations less sponsored research" (Halstead 1974, p. 27). Figure 1 demonstrates the effects of inflation on current operations in postsecondary institutions; the Higher Education Price Index (HEPI) has grown about 70 percent faster than has the CPI, increasing by 96.7 percent in 1974 versus 55 percent in 1961. Although the differential between the two has been almost constant since 1969, there is still an annual differential of 2 to 3 percent between college operating costs and inflation affecting the economy as a whole. The HEPI is calculated from expenditures in the following categories: professional salaries, nonprofessional wages and salaries, fringe benefits, services (data processing and equipment rental, communication, transportation, printing and duplication, miscellaneous services), supplies and materials, equipment, books and periodicals, and utilities. In recent years, personnel compensation, including professional and nonprofessional salaries and fringe benefits, have constituted more than 80 percent of the total: there have been dramatic increases in fringe benefits (more than 400 percent since 1961) and in utilities (more than 50 percent since 1970). While the *annual* increase in HEPI ranged from 3.6 to 5.3 percent between 1961 and 1967, it has increased at a minimum rate of 5 percent plus since then, reaching 7 percent in 1974 and dropping below 6 percent only twice, in 1972 and 1973 (Halstead 1974, p. 29).

Figure 1 indicates that educational costs have increased constantly and at a rate greater than the increase in the cost of living or inflation. These increased educational costs have not necessarily resulted

in more or better educational services, even though participation in postsecondary education has nearly tripled since 1958 and there has been an increase of nearly 1.6 million students between 1970 and 1974. as shown in Table 1.

Table 1. Enrollments of institutions of higher education by institutional type and control. Selected years: 1958 to 1974.

Institutional type and control	Enrollment				
	1958	1962	1966	1970	1974
All Universities:					
Total	3,420,414	4,403,936	6,390,000	8,580,887	10,223,729
Public	2,033,843	2,752,720	4,349,000	6,428,134	7,988,500
Private	1,386,571	1,651,216	2,041,000	2,152,753	2,235,229
4-year Institutions*					
Total	2,894,805	3,630,407	5,064,000	6,357,679	6,912,182
Public	1,590,962	2,081,463	3,159,000	4,326,162	4,793,697
Private	1,303,813	1,545,944	1,904,000	2,031,517	2,118,485
2-year Institutions					
Total	525,609	773,529	1,326,000	2,223,208	3,311,547
Public	442,881	668,257	1,190,000	2,101,792	3,194,803
Private	82,728	105,272	137,000	121,236	116,744

* includes graduate programs
Source: Golladay 1976. p. 187.

Until very recently. the student population has grown at a rate faster than the rate of growth of the adult population and their income or than the rates of growth in endowments and other income sources. Also, until recently the number of families with two or more children in college at the same time has steadily increased. These growth patterns have placed severe financial strains on those supporting the students while in school. However, this strain has increased with the leveling and decline of real per capita disposable income for significant portions of the population. In fact, between 1973 and 1975. "for the first time in fifteen years the typical person's spendable income failed to rise as much as the prices he or she had to pay" (Cell 1976. p. 1). This was the result of both inflationary shortages—notable in farm products and fuel—and unemploy-

ment. Farm prices surged by 66 percent from 1971 to 1974, and fuel prices more than doubled between 1972 and 1975, contributing a virtually unprecedented 27 percent leap in the cost of living over a 3-year period (Cell 1976, p. 1).

Inflation and expansion have had a profound effect on education, making it a more costly and larger segment of the economy. But this growth has not meant an automatic qualitative growth. In fact, although expenditures for all levels of education have increased from 5.6 percent of the Gross National Product in 1961 to 7.8 percent in 1974 (see Table 2), expenditures for items particularly susceptible to inflation, such as utilities, capital construction, salaries and benefits, have increased so rapidly that increases in expenditures have not necessarily resulted in better or, in some cases, equal facilities and services (Golladay 1977, p. 180). The changing composition of expenditures has been in the direction of a greater proportion spent on fixed costs, overhead, and supportive services, and a correspondingly smaller proportion spent on direct educational services, which, at ever inflating prices, purchased proportionately less.

Table 2. Gross National Product (GNP) related to total expenditures for education: 1929 to 1974.

Calendar year	Gross National Product (in thousands)	School Year	Expenditures for education [1] Total (in thousands)	As a Percent of Gross National Product
1961	520,109,000	1961-62	29,366,305	5.6
1965	684,884,000	1965-66	45,397,713	6.6
1969	930,284,000	1969-70	70,077,228	7.5
1971	1,054,915,000	1971-72	[2] 82,999,062	7.9
1972	1,157,966,000	1972-73	89,100,000	7.7
1973	1,294,919,000	1973-74	[2] 98,300,000	7.6
1974	1,397,400,000	1974-75	[3] 108,700,000	7.8

[1] Includes expenditures of public and nonpublic schools at all levels of education (elementary, secondary, and higher education).
[2] Revised since originally published.
[3] Estimated.

Sources: U. S. Department of Health, Education, and Welfare, Office of Education, *Statistics of State School Systems; Financial Statistics of Institutions of Higher Education*, and unpublished data; U. S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, July 1971, and July 1974.
Source: Golladay, 1976, p. 180.

Table 3. Estimated average charges (current dollars) per full-time undergraduate resident degree credit student in institutions of higher education, by institutional type and control: 1964/65 to 1974/75.

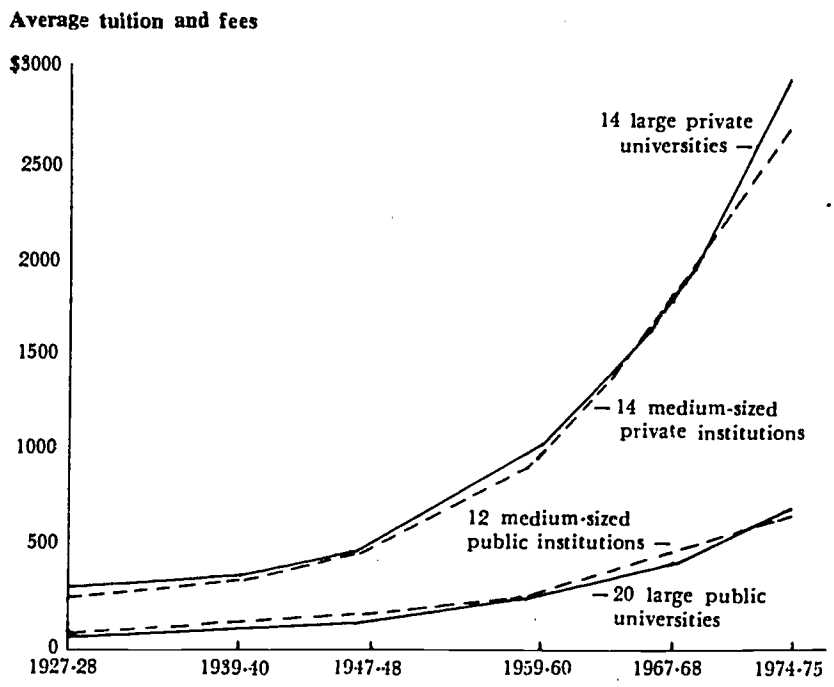
Year and control	All
1964-65:	
Public	$ 243*
Nonpublic	1,088
1965-66: [1]	
Public	257
Nonpublic	1,154
1966-67:	
Public	275
Nonpublic	1,233
1967-68: [1]	
Public	283
Nonpublic	1,297
1968-69:	
Public	295
Nonpublic	1,383
1969-70: [1]	
Public	324
Nonpublic	1,534
1970-71: [1]	
Public	352
Nonpublic	1,685
1971-72:	
Public	376
Nonpublic	1,820
1972-73: [1]	
Public	400
Nonpublic	1,869
1973-74:	
Public [2]	445
Nonpublic	2,009
1974-75: [2]	
Public	503
Nonpublic	2,290

Source: Golladay 1976, p. 230.
*Charges are for total tuition and board and room for the academic year in current unadjusted dollars.

As costs increase and salary demands grow, institutions are forced to turn to their greatest source of income elasticity—student tuition charges. Tuition has increased by more than 100 percent in a 10-year period (1964/65 to 1974/75) in both public and private institutions. Institutions, whether public or private, have turned to tuition charges to offset escalating costs over which they have no control; for example, energy costs, costs for supplies and equipment, costs for salaries and benefits, and for construction and maintenance (see Table 3). In the same 10-year period, tuition has increased faster than institutional costs, indicating once again that students are being required to bear an increasing share of the costs of institutional operations.

Viewed graphically (see Figure 2), the dramatic rise of tuition rates since 1928 indicates a tenfold increase since 1928, an enormous burden for the individual tuition payer in all types of educational institutions.

Figure 2. The rise of tuition rates.



Sources: Association of American Colleges; American Council on Education

It is noteworthy that "tuition increases in the public sector have almost exactly matched increases in median family income" (Halstead 1975, p. 105). Halstead continues, "It is unlikely this parallel relative increase was completely by intent, yet through practice, public institutions are setting tuition charges that have been consistently proportional to family ability to pay" (p. 105).

Not only has the price borne by students increased markedly but also the number of students increased rapidly, especially during the mid-1960's. Table 4 shows the rate of growth in total full-time equivalent (FTE) enrollment in higher education projected to 1990. Falling from a peak of a nearly 14 percent annual increase in 1965, total FTE college and university enrollments are now growing at about 2.5 percent annually; during the mid-1980's they are expected to decline about 2 percent per year. The enrollment estimates prepared by the Carnegie Council are probably the most optimistic enrollment forecasts in general use. The recurrent conclusion is that institutions will have more difficulty increasing the share of institutional costs borne by students at a rate equal to that of the last two decades. There simply will not be the students enrolling to pay the increasing costs.

Table 4. The percent increase over the previous year's total full-time equivalent enrollment in higher education in the United States

Year	Percent Change	Year	Percent Change
1963	7.8	1977	2.5
1964	11.2	1978	2.5
1965	13.9	1979	2.8
1966	8.4	1980	2.3
1967	7.8	1981	0.2
1968	8.7	1982	1.7
1969	6.0	1983	−0.5
1970	6.3	1984	−1.1
1971	4.4	1985	−2.0
1972	1.3	1986	−2.0
1973	2.3	1987	−0.6
1974	1.7	1988	0.4
1975	2.7	1989	0.7
1976	2.5	1990	−1.2

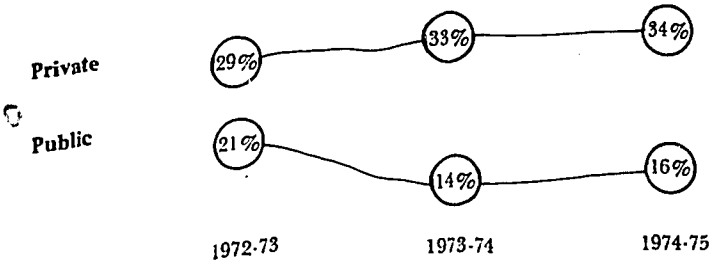
Source: Cartter 1976, p. 89.

While students have been more than proportionately affected by the increasing costs of institutional operations, colleges and univer-

sities themselves have also been severely affected. The results of a number of recent studies of the financial health of higher educational institutions are summarized in the Appendix. All of these studies indicate that many institutions are in financial trouble. Some researchers and observers are more pessimistic than others, but all agree that the basic situation of deficit-spending cannot continue indefinitely without serious consequences. While it is neither the best nor the worst of times for higher education finance, it is clearly a time of change. One-sixth of our public and one-third of our private institutions cannot incur operating deficits for an extended period without becoming bankrupt in every sense of the word. Forty-nine percent of our institutions cannot long endure the financial anemia they experience and continue to provide a vigorous educational experience. Institutions cannot continue to shift an ever increasing share of educational costs onto students without further reducing the demand for higher education—a demand which demography will most likely reduce substantially in the early 1980's even with constant prices.

The pursuit of institutional aspirations has led institutions to substantially expand their expenditures, often at a rate faster than the expansion of income. If economically rational decisionmaking were prevalent, institutions would decide among dreaming smaller dreams, becoming more efficient, and finding clients more willing to pay ever-increasing prices. However, without strong leadership and careful planning, we believe in the next 10-year span it is likely institutions will dream more grandiose dreams, become less efficient, and not find a clientele to pay the costs.

Figure 3. Institutions with budget deficits.



Source: American Council on Education. This chart is based on data from 226 private and 144 public colleges and universities of all types.

To summarize, American higher education has moved from a period of expansion and growth to one characterized by retrenchment and slow growth. During the period of growth, institutional aspirations also grew. In the present period of retrenchment, financial stringency characterizes postsecondary institutions and many of them face budget deficits.

For these institutions and others that may find themselves with a deficit, the gap between expenditures desired to meet goals and income mandates a reconsideration both of mission and of income sources. In the following section some of the assumptions and aspirations that have influenced American postsecondary institutions in the last generation are described.

A Perspective on Institutional Aspirations

We have suggested that much of the growth of American post-secondary education needs to be understood in an economic context, particularly in the present state of increasing costs and inflationary pressure. It is equally important to look at educational expansion and growth in terms of (1) its mission and aspirations and (2) its continuing tradition of enlarging its purview. A recent report of the Carnegie Foundation for the Advancement of Teaching summarizes the present situation:

> For a century (1870 to 1970), higher education in the United States experienced relatively steady and certain growth. For the prior two centuries and more (1636 to 1870), growth was not always so steady but it was, by many, considered certain. Now for the first time in our nation's history, the prospect is that growth may be both unsteady and uncertain. This is a dramatic, even traumatic, change of condition" (Carnegie Foundation 1975, p. ix).

The "dramatic" change is that many institutions are no longer able to enlarge their mission without placing the financial stability of the institution in jeopardy; John Millett, in an analysis of a study of institutional financial health conducted by *Change* magazine, concluded that "institutions that spread themselves too thin in response to perceived societal pressures will be adversely affected in a time of slowed growth, and that institutions with a clear focus on purpose are more efficient" (Millett 1976, p. 27).

Thus, the need to narrow institutional focusses and missions is related to the economic and demographic conditions affecting post-secondary education. This situation has been described by the Carnegie Foundation:

> The decline of growth patterns is basically the result of demographic factors, as we shall see, but also of changing national and individual priorities and of shifting demands for college graduates in the labor market. Its effects on outlooks within higher education are deepened because the change occurs during a period of recession and inflation combined. The short-run economic situation intensifies the long-run basic trend.
>
> The consequence of all this is that much of the higher education discourse today is couched in terms of survival. For many institutions, survival is the main current imperative. But, for all of higher education, the challenge is to do more than survive. Much remains to be done both by

> individual institutions and by public policy to assure universal access to higher education to all persons and to enlarge the creative capacity of our society, through higher education, to solve its many problems. The central theme of this commentary, thus, is "More Than Survival." Great public purposes remain to be served (Carnegie Foundation 1975, p. 4).

Faced with economic pressures, How can institutions meet their "great public purposes"? To provide some perspective, let us examine how institutional aspirations have evolved:

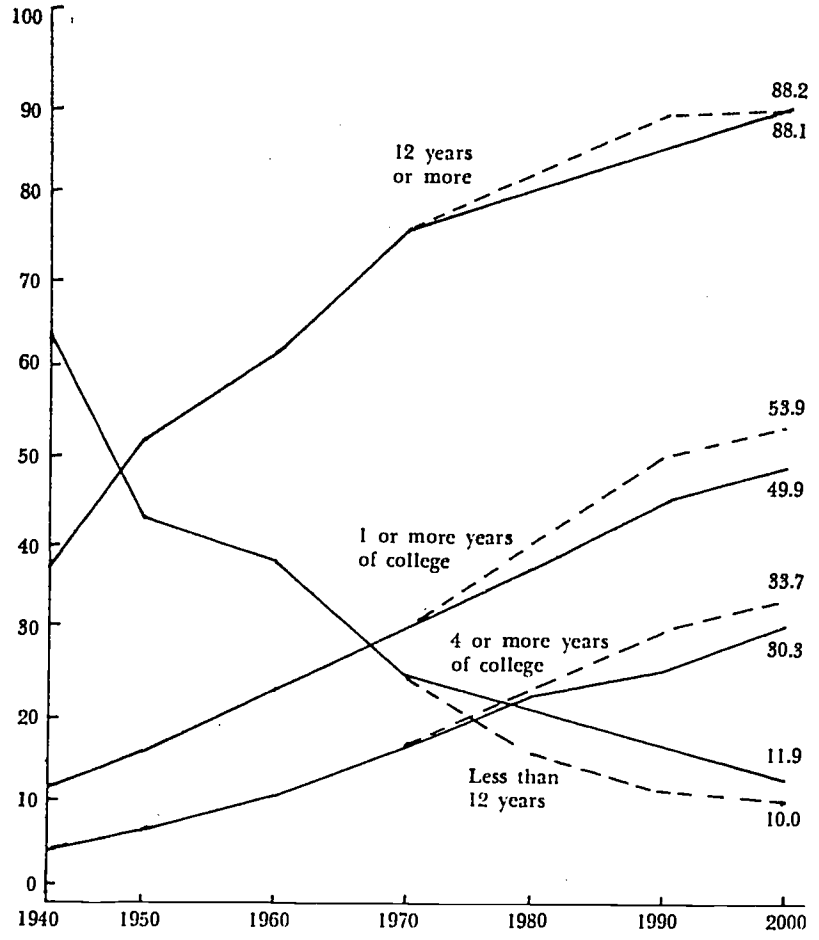
The history of American postsecondary education since World War II can be viewed as a period of growing ambition and aspiration accompanied by a growing sense of mission to encompass larger and larger segments of the population. In the years immediately following World War II, the educational attainment of the 25 to 29 age population shifted dramatically, so that more than half of that cohort had 12 or more years of school. As Figure 4 indicates, it is projected that by the year 2000 nearly 90 percent of the 25 to 29 age group will have had 12 or more years of schooling (Carnegie Commission 1973b, p. 45).

Moreover, the percent of the population in the 18 to 24 age category has also risen dramatically; from 14.2 percent in 1950 to 27.2 percent in 1965, with slight increases since that time.

In general, we have spent more money on education and have provided greater access and more diversity and opportunity than any other country in the world. This is evident in the expenditures for education as a percent of the Gross National Product, which has risen from 3.8 percent in 1953 to 6.6 percent in 1965 to 7.8 percent in 1974. The actual expenditures have increased dramatically to $109 billion in 1974 to the point where education "is a major consumer of goods and services" (Golladay 1976, p. 3). All of this suggests a major commitment of resources and energy to the goal of increased access and opportunity.

This growth of postsecondary education has at the same time resulted from and created the growth of aspirations. The United States has gradually moved from elite to mass education, and seems to be moving toward universal access. The increase in participation rates and the burgeoning community colleges indicates that trend. With the establishment of the land-grant colleges during the Civil War, growing numbers of students were able to attend college for very little money if they were otherwise qualified, with no regard to their economic or social status. What began as an option for the privileged became, during the span of a century, an expectation for many, an aspiration for others, and then, finally, a perceived entitle-

Figure 1. Projected levels of educational attainment of the population 25 to 29 years of age.



Note: Broken lines are based on assumptions consistent with Projection I prepared for the Carnegie Commission by Gus W. Haggstrom in 1971. Solid lines are based on assumptions consistent with Projection II prepared by the Carnegie Commission staff in 1973. Details of the later projections will appear in the Commission's forthcoming final report, *Priorities for Action*.

Source: Carnegie Commission staff. 1973. Based on Bureau of the Census and Carnegie Commission materials and assumptions.

Source: Carnegie Commission 1973b, p. 45.

ment. This "development from an aristocratic to a meritocratic system" has been described by T. R. McConnell (1973) as "one of the central strands in the history of American higher education" (p. 1).

McConnell asserts that the impetus for this expansion was the 1948 report of the Commission on Higher Education established by President Truman: "the Commission concluded that approximately half the population could profit from at least two years of education beyond the high school level, and that a third had the capacity to earn a four-year College degree" (McConnell et al. 1973, p. 2). The so-called "Truman Commission" established the principle of mass access based on merit and thus paved the way for federal support to socioeconomic groups that had been previously excluded. The idea of mass education has become so prevalent since the Truman Commission that in 1970 Martin Trow referred to the "lasting stigma" a mark of some special failing of mind or character, and a grave handicap in all the activities and pursuits of adult life," placed on those who have never attended college (Trow 1970, p. 25).

By the early 1970's, the Carnegie Commission recommended "universal access for those who want to enter institutions of higher education, are able to make reasonable progress after enrollment, and can benefit from enrollment" (Carnegie Commission 1971, p. 18). Thus, in the years following World War II, a growing aspiration—universal access to postsecondary education—dominated educational planning, with the aid of relatively broad and continuous federal, state, and local support, and with philanthropic encouragement. This general trend was supported as a consequence of other factors too: (1) the substantial benefits given to veterans through the G.I. bill (Servicemen's Readjustment Act); (2) the emphasis on improving the quality of education in the post-Sputnik period after 1958; (3) judicially imposed changes in the quality of education for blacks after the Brown versus Board of Education decision of 1954; and, (4) the civil-rights movement of the 1960's.

In the past 20 years these factors have resulted in unprecedented growth in institutional size and physical facilities and, equally important, in expectations and aspirations. To support these aspirations, the federal government has passed a series of bills to further the national educational mission. In nearly two decades (1958-1976) the following legislation has been implemented:

1958

National Defense Education Act (PL 85-864)—provided assistance for: state and local school systems for strengthening instruction in science,

mathematics, modern foreign languages, and other critical subjects; improvement of state statistical services; guidance, counseling, and testing services and training institutes; higher education student loans and fellowships; foreign language institutes and advanced foreign language study and training provided by colleges and universities; experimentation and dissemination of information on more effective utilization of television, motion pictures, and related media for educational purposes; and vocational education for technical occupations necessary to the national defense.

1962

Manpower Development and Training Act (PL 87-415)—provided training in new and improved skills for the unemployed and underemployed.

1963

Vocational Education Act of 1963 (PL 88-210)—increased federal support of vocational education, including support of residential vocational schools, vocational work-study programs, and research, training, and demonstrations in vocational education.

Higher Education Facilities Act of 1963 (PL 88-204)—authorized grants and loans for classrooms, libraries, and laboratories in public community colleges and technical institutes as well as undergraduate and graduate facilities in other institutions of higher education.

1964

Civil Rights Act of 1964 (PL 88-452)—authorized the Commissioner of Education to (1) arrange, through grants or contracts with institutions of higher education, for the operation of short-term or regular-session institutes for special training to improve ability of elementary and secondary school instructional staff to deal effectively with special education problems occasioned by desegregation; (2) make grants to school boards to pay, in whole or in part, the cost of providing in-service training in dealing with problems incident to desegregation; (3) provide school boards with technical assistance in desegregation and required nondiscrimination efforts in federally assisted programs.

Economic Opportunity Act of 1964 (PL 88-452)—authorized grants for college work-study programs for students of low-income families; established a Job Corps program and authorized support for work-training programs to provide education and vocational training and work experience for unemployed youths; provided training and work experience opportunities in welfare programs; authorized support of

education and training activities and of community action programs, including Head Start, Follow Through, Upward Bound; authorized the establishment of the Volunteers in Service to America (VISTA).

1965

Higher Education Act of 1965 (PL 89-329)—provided grants for: university-community service programs, college library assistance, library training and research, strengthening developing institutions, and educational opportunities. Insured student loans, implemented teacher training programs, and provided funds for undergraduate instructional equipment. Established a National Teacher Corps and provided for graduate teacher training fellowships.

1966

Adult Education Act (PL 89-750)—authorized grants to states for the encouragement and expansion of educational programs for adults, including training of teachers of adults and demonstrations in adult education (previously part of the Economic Opportunity Act of 1964).

1967

Educational Professions Development Act (PL 90-35)—amended the Higher Education Act of 1965 for the purpose of improving the quality of teaching and to help meet critical shortages of adequately trained educational personnel. It authorized support for developing information on needs for educational personnel, training and retraining opportunities in response to changing manpower needs, attracting a greater number of qualified persons into the teaching profession, attracting persons who could stimulate creativity in the arts and other skills to undertake short- or long-term assignments in education, and helping to make educational personnel training programs more responsive to the needs of schools and colleges.

1968

Higher Education Amendments of 1968—authorized new programs to assist disadvantaged college students through special counseling and summer tutorial programs, as well as programs to assist colleges to combine resources for cooperative uses, including closed-circuit television and computer networks. Also authorized grants to expand and strengthen student cooperative programs and to expand programs that provide clinical experiences to law students.

1972

Education Amendments of 1972—established a National Institute of

Education; general aid for institutions of higher education; federal matching grants for state student incentive grants; a National Commission of Financing Post-secondary Education; State Advisory Councils on Community Colleges; a Bureau of Occupational and Adult Education and state grants for the design, establishment, and conduct of postsecondary occupational education; and a bureau-level Office of Indian Education. It also amended current Office of Education programs to increase their effectiveness and better meet special needs, and prohibited sex bias in admissions to vocational, professional, and graduate schools, and public institutions of undergraduate higher education.

1974

Education Amendments of 1974—provided for the consolidation of certain education programs; established a National Center for Education Statistics in the Office of the Assistant Secretary for Education and transferred to the Center, from the Office of Education, the responsibility for the collection and diffusion of education statistics; specified that the Office of Education shall be the primary Federal agency responsible for the administration of programs of financial assistance to educational agencies, institutions, and organizations; authorized a White House Conference on Education, and mandated several education surveys and studies (Grant and Lind 1976, pp. 143-149).

1976

Education Amendments of 1976—authorized the extension of most of the provisions of the Education Amendments of 1972 and 1974; created an Office of Lifelong Learning in the Office of Education; and expanded the language of the legislation to include adults in postsecondary education.

The national commitment to mass education can be seen in the growth of enrollments: "In the fall of 1958, only ten campuses had total enrollments of more than 20,000 and these accommodated 8 percent of the national student population" (Gallant and Prothero in Carnegie Foundation 1975, p. 34). In contrast, by 1969, 65 campuses had enrollments exceeding 20,000 and they accounted for 27 percent of all students. Twenty-six of these campuses had more than 30,000 students and accounted for 15 percent of the national enrollment (Carnegie Foundation 1975, p. 35).

With such large numbers of students enrolled in public institutions, it is worthwhile to examine trends in the public sector as shown in Table 5:

Table 5. Enrollment in institutions of higher education by size of institution, 1968 and 1974.

Institutional Size	Total Enrollment			
	Fall 1968	Percent	Fall 1974	Percent
Less than 10,000	3,969,608	53%	4,828,792	47%
10,000 - 19,999	1,624,674	22	2,330,591	23
20,000 - 29,999	829,804	11	1,356,935	13
30,000 and over	1,089,005	14	1,707,411	17
	7,513,091	100	10,223,729	100

Source: Golladay 1976, p. 187.

Higher education enrollments grew by over 30 percent in six years, with large campuses (over 20,000 students) growing about 70 percent in the same period. It is unlikely that such a growth spurt will ever again occur in the education sector. There are two principal reasons for that assertion: first, there is and has been a declining birthrate that will result in a declining youth population at least through 1995; and second, there is a present and predicted saturation in the labor market for college graduates (O'Toole 1975; Freeman 1976). There are, in the opinion of the Carnegie Foundation for the Advancement of Teaching, numerous uncertainties that affect future enrollments in higher education:

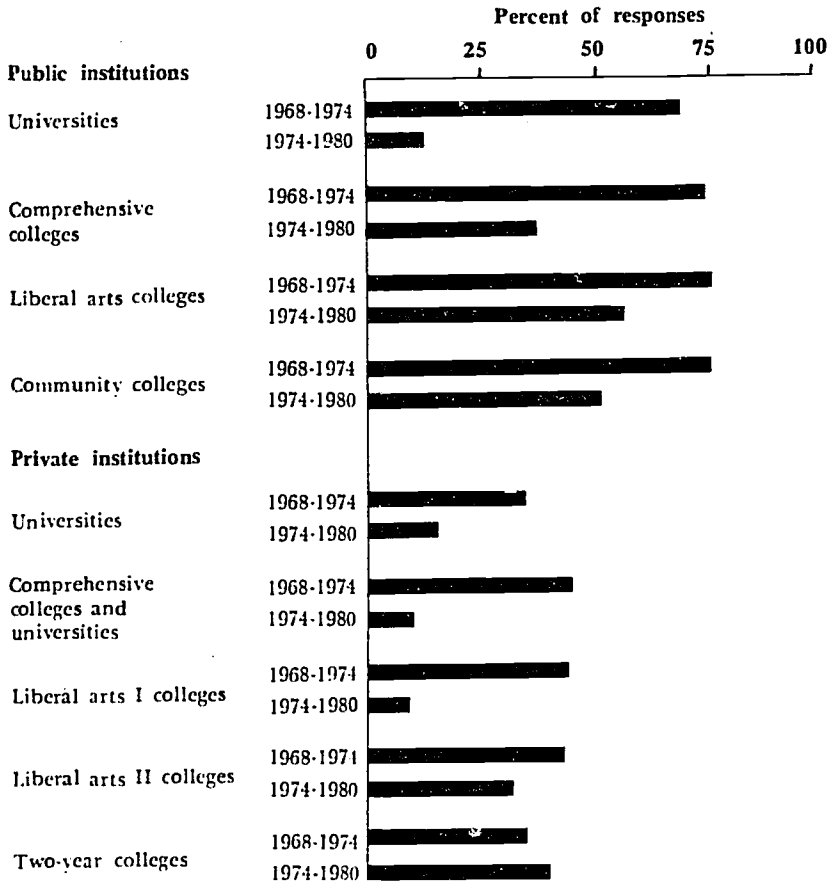
(1) the state of the economy;
(2) labor market changes;
(3) life-style changes of the young;
(4) impact of a volunteer army;
(5) changes in the high school graduate rate;
(6) uncertainty about the birthrate;
(7) decline in veterans' benefits for education;
(8) volatile graduate enrollments;
(9) ability of institutions to attract new pools of potential students; and
(10) changes in public policy (Carnegie Foundation 1976, pp. 46-49).

These uncertainties reflect long-term substantive changes in American society and thus mandate a change in thinking about the linkage between aspiration and growth: a readjustment from a growth mentality to a steady, or perhaps unsteady, state where the focus will be on reallocation. The Carnegie Study indicates that adminstrators now expect "that institutional change will come more from program

substitution that from program addition" (Carnegie Foundation 1975, p. 88). Already expectations of administrators are being scaled back, as shown in Figure 5. Most administrators expect to add fewer new programs in the years ahead.

We have suggested that American education grew enormously in the period from 1958 to 1970, and its sense of aspiration grew at a

Figure 5. "Increase" in the number of instructional programs (undergraduate level)—Actual 1968-1974 as compared with projected 1974-1980.



Source: Carnegie Foundation 1975, p. 89.

concomitant rate. When in 1970 there was general recognition that the period of growth was coming to an end, and that the already large cost-income gap would increase, questions were raised about the sense of aspiration in a period of reduced growth. Many of these questions focused on the problems of adjustment and of governance, notably: (1) an intensified struggle for authority and control; (2) an increase in the student-faculty ratio; and (3) an impairment of educational quality.

Table 6 (following) illustrates the first of these, that "the strong tendency in higher education under current conditions is for authority that traditionally has been widely dispersed within and among institutions to be more highly concentrated (Carnegie Foundation 1975, p. 14).

Most educators agree that financial pressures of leveling enrollment and funding can lead to an impairment of qualities, as shown in Table 7.

Ultimately, the question of quality must be dealt with by those who exercise control, and the available evidence suggests that more centralized governance will increase. The Carnegie Foundation for the Advancement of Teaching has suggested "that guidelines for reallocation be developed by boards of trustees and agents. . . [to] provide objective bases for concepts like 'financial exigency' and 'program'. . . (Carnegie Foundation 1975, p. 91).

This trend toward more centralized authority will make the process of decisionmaking of increasing interest to educators and the general public.

The most significant tasks of institutions will be to continue to develop new programs, to modify existing ones, and to eliminate programs that have lost their utility or effectiveness. The Carnegie Study suggests that there is already evidence of the following trends:

(1) fewer programs; (2) heavier reliance on program and course review; (3) the use of substitution rather than addition in making program and course changes; and (4) less hiring of new faculty (Carnegie Foundation 1975, p. 95).

We have attempted to describe the process by which institutional aspirations have grown and to suggest some of the implications of those aspirations during periods of growth and retrenchment. While it seems likely that surges of growth in resources and enrollments will not occur again as in previous generations, it is probable that cycles of expansion and contraction will recur. In the next section, the decisionmaking structures that educational institutions have used and may use to shape their futures are examined.

*Table 6. Shifts in authority from 1968-1974 and anticipated for 1974-1980**

	Universities		Comprehensive colleges and universities		Liberal arts colleges			Two-year colleges	
	Public	Private	Public	Private	Public	Private I	Private II	Public	Private
From department to campus administration									
1968-1974	25	24	22	26	32	19	20	20	21
1974-1980	35	23	24	28	16	14	24	20	19
From campus to system board									
1968-1974	49	33	55	25	53	7	20	29	27
1974-1980	47	17	44	20	16	4	16	34	14
From system board to coordinating agency									
1968-1974	50	0	46	9	57	20	6	31	0
1974-1980	71	0	59	27	36	36	16	47	14

*Percentage of administrators who indicated a shift of authority in the specified direction.

Source: Carnegie Foundation 1975, p. 15.

Table 7. The impact of the leveling of enrollment and funding on the quality of programs, students, and faculty.

Percentage of administrators responding "impairs"

	Universities		Comprehensive colleges and universities		Liberal arts colleges			Two-year colleges	
	Public	Private	Public	Private	Public	Private I	Private II	Public	Private
Programs	69	49	67	40	50	52	49	54	50
Students	40	50	47	57	46	55	49	34	53
Faculty	60	46	55	33	15	35	46	43	37

Percentage of administrators responding "enhances"

	Universities		Comprehensive colleges and universities		Liberal arts colleges			Two-year colleges	
	Public	Private	Public	Private	Public	Private I	Private II	Public	Private
Programs	22	24	20	44	50	22	37	37	31
Students	32	17	23	25	31	19	30	37	28
Faculty	30	27	34	47	69	35	36	38	37

Source: Berkeley Center St..cy.

27 Source: Carnegie Foundation 1975, p. 18.

Decisionmaking and Aspirations

In most instances, the governance system and decisionmaking process in educational institutions *respond to* rather than *initiate* policy related to aspirations and expectations. No one person or group is in control of the organic and orderly development of a set of aspirations. This is because the process is neither organic nor orderly; it is "pressure responsive," driven most by those individuals, groups, forces, and circumstances who choose to assert themselves. In such a system, student needs are often ignored because students as purchasers and consumers represent the most flexible income component of the institutional budget.

A number of paradigms of decisionmaking in educational planning and management have been proposed. Eight suggested conceptual structures for academic decision-making are: bureaucracy, collegium, political incrementalism, open system approach, compound system, organized anarchy, analytical model, cybernetic (Weathersby 1975).

A general model of decisionmaking can subsume all of these paradigms. This suggests that individual choice conceived in its broadest terms provides a basis for understanding and predicting the actions of individuals acting both independently and as members of organizations.

This general decision paradigm incorporates nine elements that describe an individual's decision context: three types of variables (control, exogenous, state); four linking structures (observing system, value system, causal relationships, constants); and two other considerations (time horizon, uncertainty structure). This view is a broad consideration of the appropriate role of decisionmaking in institutions of higher education, but is focused on formal management systems that, in practice, are often separated from institutional goal-setting. That is, the rational and analytical process described is often not applied to institutional goal-setting, which is more pressure responsive.

Few institutions operate within the parameters of the general-decision paradigm even on a management level. The process by which decisions relating to institutional goals are made is amorphous and varied, and more responsive to pressure and caprice than reason.

To understand the nature of these pressure sources, it may be useful to review some work done in the past decade that describes ways

in which institutional aspirations developed within the framework of institutional decisionmaking.

Since institutional goals and decisions relating to them are particularly affected by resources, resource allocation, income, and expenses, most of the significant work reviewed here is based on economic theory. The major approaches examined are: (1) Breneman's economic theory of educational production, which measures output by degrees awarded and by the efficiency of production; (2) Buchanan and Devletoglou's "economic diagnosis" of students as consumers, faculties as producers, and taxpayers as owners; and (3) Caplow and McGee's analysis of the academic profession and its impact on the educational system.

The decisionmaking structure of most universities is micro- rather than macro-responsive, more elastic in establishing focused rather than broad objectives. David Breneman, in reference to the University of California at Berkeley's *Revised Academic Plan, 1969-1979,* notes that "the major future responsibility of most departments in the professional colleges and the College of Letters and Science will be education for the doctorate" (Breneman 1971, p. 3). That objective was congruent with the behavior and aspirations of large numbers of faculty members, but was less congruent with other programs and goals of the university. Breneman's theory of departmental behavior recognizes the "joint and interacting behavior of two groups, faculty and students, whose objectives may be more in conflict than in agreement" (Breneman 1971, p. 20). His assumption is that the vast majority of graduate students view their program participation not necessarily in terms of financial return on investment but in terms of a life-style. Thus, they might be characterized as wanting to complete their education quickly, to be assured that they will be able to obtain the jobs they seek, and to keep to a minimum both the actual costs to them as well as the loss for forgone income.

Faculty members (and departments that reflect the value of individual members) seek to "maximize . . . prestige" and reputation, which Breneman says "is enhanced by the quality of a man's research publications and by the quality of the graduate students who serve as apprentices under him" (Breneman 1971, p. 36).

Breneman continues: "In the same way that a firm will not survive if it fails to maximize profits, a faculty member at Berkeley will not survive if he fails to maximize prestige" (Breneman 1971, p. 36). Individually and collectively, then, faculty members seek those activities and programs that maximize prestige in some sense without regard for its ramifications within other segments of the institution.

In a complex institution such as the modern university, the prestige-maximizing behavior of faculty members may place pressure to deploy institutional resources in ways that are responsive to their needs, and thus influence and direct institutional goals.

Breneman's research suggests that institutional goals can develop through the efforts of one segment of the university community. If there are ample resources, there are few unintended consequences; if resources are scarce, conflict may occur when the goals of one group are not congruent with another's; if too many conflicting goals are present, chaos can ensue.

It is from the perspective of institutional chaos that Buchanan and Devletoglou (1970) construct their economic diagnosis. Looking back at the decade from 1960 to 1970, they argue that "students pursue objectives unrelated to the purposes and standards upon which the academic world is based" (Buchanan and Devletoglou 1970, p. 3). They contend that education is an "economic goal" and must be examined in terms of supply, demand, and cost. It is, however, unique because "1. those who consume its product do not purchase it; 2. those who produce it do not sell it; and, 3. those who finance it do not control it" (p. 8).

They regard universities as

> free-floating islands, moored neither to the demands of consumers nor to the controls of owners. The free-floating island remains idyllic until the foul winds blow. But then some harbor. some fixity, is desperately needed. Governing boards fail to provide this in present university crises situations (p. 78).

Buchanan and Devletoglou contend that no group acts as "owners" of educational institutions: thus, no one acts to prevent, demand, or advocate with the traditional authority of owners. This, they contend, has grown gradually but insidiously until it overcame the university structure and created an atmosphere of indecision and anarchy.

They conclude that the university has failed to respond "to the demands of student-consumers on the one hand and to those of the taxpayer-owners on the other" leaving a "monopoly control of faculties and administrators" which "must be reduced and perhaps dramatically" (pp. 160-161). They view this a serious flaw in decision-making processes because "modern universities are owned not by faculties but by those governing boards that serve as agents for taxpayers or contributors" (p. 161).

The approaches of Breneman and of Buchanan and Devletoglou focus on faculty members as sources of pressure in establishing institu-

tional goals. Caplow and McGee (1965) also focus on the academic profession in an effort to understand how large and complex institutions like the modern university operate. Their work, now almost 20 years old, described with reasonable accuracy what actually occurred in academia during the halcyon days of the 1960's: high faculty mobility, reduced teaching load, increasing emphasis on research, increase in tenure, and diffusion of structure and authority within institutions.

Although there is far broader involvement in the hiring process and in the decision which leads to hiring as a result of affirmative action and of the greater enfranchisement of students and non-academic personnel in the selection process, Caplow and McGee's conclusion that faculty members are *active* participants in the hiring process and administrators and trustees are *passive* participants is still essentially valid.

They believe that traditional notions of the distribution of power cannot be applied to universities because of its "double system of ranking," where "academic rank is conferred by the university, but disciplinary prestige is awarded by outsiders. . ." (Caplow and McGee 1965, p. 177). The dilemma is that while power is not automatically inherent in any specific title or position, it must be exercised, or the university will cease to function.

In Caplow and McGee's opinion:

> The solution to this dilemma which has evolved in the American university is to let power lodge pretty much where it may. The fundamental device by which stresses in the university are resolved is a kind of lawlessness, consisting of vague and incomplete rules and ambiguous and uncodified procedures (p. 177).

They conclude, "This system of loose-lying power helps to account for the extraordinarily high incidence of conflict reported in the universities we studied and the widespread and passionate dissatisfaction of professors with the workings of academic government" (p. 178).

The preceding discussion illustrates an important point: decisions relating to institutional aspirations are not made in an organized and inclusive manner; rather, they are made in response to pressure, both organized and unorganized, which comes from various constituencies that influence and are influenced by the university. We have chosen to illustrate the way in which faculty concerns and interests create pressure to select or advance particular goals. Similar illustrations could be made for administrators, trustees, the disciplines and

professions, government, taxpayers, unions and, to a less organized and possibly less effective degree, students.

Each organization has an internal dynamic of change and formal or informal measures of success as perceived by its members. Only in rare instances are colleges and universities *client centered* in their decision processes. In a client (student) centered process, the knowledge and skills required by clients are the prime measures of both organizational effectiveness and faculty and administrative success. As many other authors have argued, colleges and universities are frequently faculty or administratively centered, and recognition by professional colleagues and peers is the prime measure of individual success. As long as this traditional basis of decisionmaking in higher education continues, the likelihood of congruity between institutional aspirations and client demands and needs will be small.

At issue is not the token representation of students in governance structures of institutions or faculty committees, since these act to assimilate students into value systems and philosophical orientations in effect at educational institutions. The more fundamental question is, How can structural changes in institutional decisionmaking bring greater congruity between institutional aspirations and individual choice? Implicit in effecting such changes in decisionmaking is the desire and need to increase the willingness of students to pay for educational services.

Conclusion: One Possible Future

Since the beginning of the nineteenth century, the major movements of American higher education have been in the direction of creating "packages" of experiences for students: the liberal arts experience, the Ph.D. program, the technical and vocational training programs leading to certificates, the general education curriculum—each a discrete package of academic experiences. In addition, our institutions offer a plethora of student services including health and psychological counseling, job placement, housing options, and many others. Also the Carnegie unit and relatively standard curricula have given to students who have partially completed their educational package at one institution the option to transfer to a similar institution to complete their program. Common requirements for the bachelor's degree and similar calendars and curricula enable faculty to choose the content of the courses they teach, while students choose whether or not to attend and partake.

The components of a collegiate educational program normally include at least the following: the assessment of prior learning in formal academic settings or elsewhere; academic advising; career advising; direct instruction: assessment of direct instruction; certification; and linkages to additional education or work. Most institutions offer these educational services as a single package. Usually it is not possible for a client to purchase only one of these services; for example, a client cannot obtain only career advising or only certification. Most career and academic advising is performed by faculty who are untrained and unsupervised in the performance of this responsibility. Although the processes for assessing prior learning are becoming more sophisticated and more diverse, the dominant mode is still only to transfer credits of formal courses successfully completed at other institutions (Keeton 1976). Although there are some notable competency-based alternatives, certification is still primarily determined by the accumulation of previously completed courses, based on the assumption that the whole is equal to the sum of the parts. In this framework colleges and universities are equivalent to vertically integrated firms, in which the control of all the components lies within the same institutional structure. It is not surprising that within this structure that there is little congruity between individual and institutional aspirations.

At the same time there is a small but growing number of examples of special purpose organizations that focus primarily on only one of the components described above. There are assessment centers that evaluate prior academic and life experience in terms of degree equivalents. There are networks of academic advisors, such as at Campus Free College, who provide no instruction but do suggest means by which individuals can use existing educational resources to satisfy their academic objectives; there are career counseling centers that help individuals consider academic and nonacademic channels to increase their career development; there are extensive offerings of activities of direct instruction that offer no academic credit and no individual assessment, which is the pattern of many extension courses. The New York State Regents External Degree Program and the Thomas Alva Edison College of New Jersey are examples of certification programs that offer no instruction, no advising, and no individual counseling. Finally, there are job-education networks and linkages that are run completely independently of academic institutions.

This "unbundling" of educational services has two major impacts: it changes the structures and incentives for decisions in an educational institution that offers individual services and it alters the student cost-benefit calculus for students who are now empowered to purchase just the services they find desirable.

There is little expectation that the wide variety of objectives sought by students and faculty should significantly overlap. Students are asked to support an increasing proportion of the total cost of operating all college and university activities. It is understandable that they would seek to choose more discriminantly among the services offered. It is understandable that faculty and administration would be reluctant to decentralize or differentiate their services when student priorities differ from their priorities. To the degree to which traditional colleges and universities are unwilling to decentralize their services, a market will be available for new, specialized organizations to enter. Most of these new organizations may well be private simply because of the ease of incorporation, but there are important cost/effectiveness considerations that could attract public support as well.

As institutions seek to align their aspirations and their resources, they will face many difficult choices. Among them are the need to choose program specialization, functional specialization, alternative patterns of resource use that may be more efficient, new sources of income, and increased reliance on tuition and fees.

The essence of our argument is that:

(1) in the past 15 years, institutions have expanded their expenditures per student at a rate much faster than the rate of increase in institutional costs;

(2) presumably these expanded activities and services have enabled institutions to move toward their aspirations or objectives;

(3) the cost of meeting institutional aspirations has shifted increasingly to students;

(4) the analyses of institutional decision processes suggest that faculty and administrative incentives and objectives are very different from student incentives and objectives; and

(5) the entry on the educational market of new organizations that provide limited educational functions (such as assessment or certification) at limited student cost and that are much more congruent with student aspirations will create increasing pressure on traditional institutions to directly link student aspirations and student costs in lieu of the current disjunctive between institutional aspirations and student costs.

The consequences of these structural incongruities are not only interpersonal and organization conflict, manifest in the late 1960's, but also the increasing financial distress and imbalance of institutions. The organizational conflict produced some restructuring of participation in governance and a high turnover of administrators, but little change in institutional aspirations. On the contrary, the financial distress is leading institutions to reconsider their role, purpose, and mission, as well as their patterns of resource use. To the extent these recommendations occur and are implemented, they portend a future of substantively different institutional arrangements than higher education now offers.

Appendix: Studies of the Financial Condition of Educational Institutions

Since 1970, the financial condition of educational institutions has been of increasing concern not only to administrators, who have seen spiraling costs, but to students and parents faced with annual tuition increases, and to state and federal officials to whom institutional officials increasingly turn for relief and assistance. Three major studies have been undertaken and each has been scrutinized by an eager, involved audience. Earl Cheit, on behalf of the Carnegie Commission, undertook a study of 41 institutions in 1971 and then undertook a follow-up study two years later. Howard Bowen and John Minter, on behalf of the Association of American Colleges, examined 100 private institutions in 1975 and again in 1976 in their ongoing study of institutional finance. Finally, Lupton, Augenblick and Heyison undertook a detailed study of the financial state of higher education published in the fall of 1976 in *Change*.

The Lupton et al. study used sixteen variables, including institutional type and control, trends in enrollments, operating and plant-addition expenditures, and a variety of financial ratios. The conclusion was that of all ranked institutions:

> . . . 25.1 percent were in the healthiest category (A) while 43.9 percent were in healthy categories A and B (see Chart 3 on page 25). Category D, somewhat unhealthy, contained over one-third of all ranked institutions. An additional 14.4 percent of all institutions fell into the least healthy category (E). This distribution of institutions depicts the financial stress that exists in the higher education community, since one would have expected a more normal distribution under the methodology employed (Lupton et al., September 1976, p. 24).

The following chart and table provide detailed information about how institutional "health" was determined and provide some comparative data relating to other institutions. Table 8 describes the health indicators.

Once determined, these variables were combined to produce an institutional "score" that was placed on a scale ranging from *unhealthy* (E) to *relatively unhealthy* (D), to *mean score* (C), to *relatively healthy* (B), to *healthy* (A). When calculated for all institutions considered, it was found that almost one-half of all academic institutions can be considered to be in an unhealthy condition. Figure 6 shows the financial condition from unhealthy to healthy of all institutions based on the Lupton et al. study.

Table 8. The sixteen key institutional health indicators

Categorical Variables	
Private control	A categorical variable distinguishing privately controlled institutions from others.
Two-year college	A categorical variable distinguishing two-year institutions from others.
Trend Variables	
Trend in undergraduate FTE enrollment	Undergraduate full-time equivalent enrollments.
Trend in graduate FTE enrollment	Graduate level full-time equivalent enrollments.
Trend in educational and general expenditures	Educational and general (E and G) expenditures.
Trend in plant addition expenditures	Plant additions: the increase or decrease in reported book value for a given year. A 10-percent increase in this item indicates that total expenditures for plant and equipment in 1974 were 10 percent above those made in 1972, not that total plant in 1974 was 10 percent greater than in 1972.
Financial Ratios	
Current funds revenue-expenditure ratio	The current funds revenue-expenditure ratio summarizes whether the institution's operating funds cover its operating expenses.
Current funds revenues: Fixed operating costs ratio	This ratio was intended to measure the institution's ability to cover its fixed costs. Since, because of tenure policies, we regarded most labor costs as fixed, this ratio is not strictly comparable to its business counterpart.
Gift, grant, and contract revenue: Current funds revenue ratio	This ratio measures the importance of gifts and outside nonresearch support (excluding direct governmental subsidies for instruction) among the institution's revenue sources.

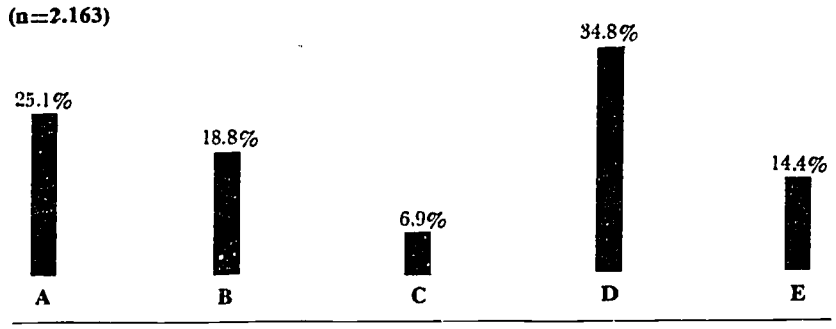
Source: Lupton et al., September 1976, p. 24.

Table 8. The sixteen key institutional health indicators—(Continued)

Financial Ratios — (Continued)

Academic mission expenditures: Educational and general expenditure ratio	Academic mission expenditures include all educational and general expenditures except maintenance, plant operation, and administrative costs. The ratio indicates how much of the institution's resources are devoted to academic uses.
Tuition and fees: Student aid revenues	Student aid revenues include all monies received for or restricted to student aid. As mentioned in the text, this ratio may serve as a proxy for student aid effort.
Current funds revenues: Plant assets ratio	Plant assets are measured at book value. This ratio measures the revenue productivity of the institution's assets.
Plant assets: FTE enrollment ratio	This ratio indicates the amount of plant assets "used" in educating one student and is a rough indicator to how intensively the plant is utilized.
Graduate FTE: Undergraduate FTE ratio	The ratio of graduate FTE to undergraduate FTE, as is explained in the text, serves as a proxy for major research institutions.
Educational and general expenditures: Degrees conferred ratio	This is an estimate of the cost of producing one degree graduate. Graduate and undergraduate costs are averaged.
Freshman FTE: Undergraduate FTE ratio	This ratio reflects persistence patterns among the undergraduate population within the institution. It is affected by attrition and by the mix (if any) between students in two- and four-year degree programs.

Figure 6. Financial condition of all institutions



Source: Lupton et al., September 1976, p. 25.

Although more extreme than some earlier findings, these results are basically consistent with the first findings by Earl Cheit, who surveyed the financial condition of 41 institutions in 1970. His conclusions were ominous:

> . . . 29 of the 41 colleges and universities in this study (71 percent) were, at the time of the campus visit, headed for financial trouble or were in financial difficulty. The remaining 29 percent, 12 schools, were considered not in financial trouble at the time of the campus visit (Cheit 1971, p. 139).

Cheit found in his study that the institutions examined had undergone similar experiences during the 1960's:

> Total current fund expenditures have been rising during the 1960's at the rate of 8.1 percent per student per year. For the schools in financial difficulty it has been 10.3 percent. Campus interviews identified five important components of expenditure. Their percentage point shares of the cost growth during the last three years of the decade are estimated in this study as (1) general inflation, 2.4; (2) faculty salaries, 2.6; (3) student aid, .9 to 1.7; (4) cost of campus disturbances, .3 to 1.0; and (5) growth in responsibility, activities, and aspiration, 1.5 to 3.5. Almost all institutions in the study are cutting expenditures, and most private schools are being forced into deficits. For most, the expenditure rate has dropped sharply in the last year or two. But they appear still to be running behind (Cheit 1971, p. 138).

When he undertook a follow-up study two years later, Cheit concluded that most institutions had achieved "a certain degree of stability, fragile but real" (Cheit 1973, p. 8). He found that numerous changes had taken place within the 41 institutions and that

> . . . it is clear that these changes have been effective in the short-run in

> slowing down and perhaps even halting eroding economic conditions. In almost all of the 41 institutions, the gap between expenditures and income is no longer widening; in most the gap in fact appears to be closing, and in some the gap has been eliminated. Although the institutions have been aided by some factors external to them, such as the reduced rate of inflation . . . the primary factors in this somewhat improved situation have been internal, the efforts of the campuses themselves.
>
> As a consequence, there is among campus administrators more optimism about the financial future of their institutions than one could have predicted two years ago. It is a guarded optimism, and with good reason, for it is based on rather fragile conditions (Cheit 1973, pp. 15-16).

Similarly, in the study of 100 private institutions undertaken in 1975, Bowen and Minter conclude that:

> . . . about 27 percent of the institutions in the sample, and by inference 27 percent of all private institutions, are in a condition that could be described as serious trouble. This judgment is based on such factors as declining enrollment, declining selectivity of students, failure of revenues to keep pace with inflation, deterioration of various ratios of assets to liabilities, etc. This is by no means a negligible percentage (Bowen and Minter 1975, p. 77).

Their most recent report, issued in May 1976, reiterates their earlier findings:

> We found that a third of the institutions could be classified as of medium current strength and holding their own over time. We also found that some currently strong institutions were gaining ground and some losing ground. And we found the same condition among weak institutions: some were gaining ground and some losing ground. The main finding was that there are success stories in private higher education as well as distress, and the successes or distress are not confined to any one category of institutions. Moreover, when we checked on the condition of institutions that we had judged to be in distress last year, we found that some had achieved a turn-around. This fact has led us to be cautious about providing "box scores" of the number of institutions in distress. Indeed, we classified only six out of ninety-three institutions as being at the same time currently weak and losing ground over time. We are not ready to predict the demise of any of these institutions though we do not belittle the odds against which they are struggling (Bowen 1976, pp. 96-97).

While the magnitude of the financial distress reported by institutions differs from survey to survey, the consistent finding that a substantial proportion of (particularly private) institutions are experiencing financial distress is significant. Observers, researchers, and practitioners report that some adjustments have been made, that a "precarious balance" between income and expenditure has been achieved, but that this balance is continuously threatened by rising

prices and a stabilizing student demand. Lupton et al. summarize this succinctly and effectively:

> The financial future of all higher education institutions appears to be more delicate than a decade ago. A myriad of new and crucial social programs place increasing demands on the state treasuries that affect the availability of public subsidies. Private institutions face cost increases that are only partially offset by increases in state and federal support. Private institutions suffer from a price differential that is frequently 4:1—a differential that will not be reduced by tuition equalization grants in a time of constrained resources or underenrollment at public institutions. Institutions that are going to be financially healthy in the years ahead will plan well, concentrate on high-quality programs with broad appeal, and reduce expenditures that have low institutional utility. Even prestigious institutions with sizeable endowments will have to make special efforts to eliminate annual deficits and maintain a pattern of long-run financial equilibrium. Specialized institutions offering high-cost programs are vital, but responsibility for provision of these programs cannot be assumed by all without generally eroding financial stability and educational quality (Lupton et al., September 1976, pp. 29-30).

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The ERIC Clearinghouse on Higher Education abstracts and indexes the current research literature on higher education for publication in the National Institute of Education's monthly *Resources in Education* (RIE). Readers who wish to order ERIC documents cited in the bibliography should write to the ERIC Document Reproduction Service, Post Office Box 190, Arlington, Virginia 22210. When ordering, please specify the ERIC document number. Unless otherwise noted, documents are available in both microfiche (MF) and hard/photocopy (HC).

The first part of the bibliography lists the 10 works most helpful in preparing this essay, and the ones we believe are worth detailed examination; next is a list of more than 60 references to books and articles that provide additional depth and detail; that is followed by a list of publications of the ERIC Clearinghouse on Higher Education that pertains to this general topic.

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