This research brief provides summary data on the size of endowments of U.S. colleges and universities. It notes the estimated market value of endowments, examines their growth from 1977 to 1987, contrasts data from independent institutions to those from public colleges and universities, indicates the heavy concentration of endowment in a relatively limited number of institutions, and notes the per student value of endowments and their contribution to current institutional revenues. Highlights reveal that: (1) the estimated market value of endowments at U.S. colleges and universities totaled $58.2 billion at the end of fiscal year 1987, with 82 percent of funds held by independent colleges and universities; (2) endowment per full-time-equivalent student increased by nearly 73 percent in constant dollars between 1977 and 1987; (3) annual endowment earnings (in constant dollars) that were contributed to institutions' current operating revenues increased from 1977-87 by about two-thirds; and (4) endowment earnings currently represent about half of 1 percent of current funds revenues in the public sector and 5.2 percent in the independent sector. The brief concludes that, nationally, endowment income cannot be looked upon as a major source of funding. Contains 4 end notes, descriptions of 8 data sources, and 10 references. (JDD)
Endowments: How Big and Where

Charles J. Andersen
Endowments: How Big and Where

Charles J. Andersen

This research brief provides summary data on the size of endowments of U.S. colleges and universities in recent years. It is designed to give a general overview of the subject for the reader who has an interest in the financial resources of higher education. It does not provide detailed information on the investment philosophies or techniques of investment and money management. The brief contrasts data from independent institutions to those from public colleges and universities, indicates the heavy concentration of endowment in a relatively limited number of institutions, and notes the per student value of endowments and their contribution to current institutional revenues.

HIGHLIGHTS AND IMPLICATIONS

- The estimated market value of endowments at U.S. colleges and universities totaled $58.2 billion at the end of fiscal year (FY) 1987. Four-fifths (82 percent) of all endowment funds were held by independent colleges and universities.
  - This implies that the growth and productivity of endowments has a greater relative impact on the independent sector than on the public.
- Endowments of independent institutions at the end of FY 1987 had nearly doubled (91 percent increase) in terms of constant dollars since FY 1977. Endowments for public institutions increased by 77 percent in the same period.
  - This implies that substantial growth in endowments has been shown in both sectors of higher education, with the independent sector more than holding its own in recent years.
- Endowments at the 100 most heavily endowed institutions (twenty of which are public) accounted for 7 out of every ten endowment dollars in fiscal year 1987.
  - This implies that the growth and productivity of endowments are especially important to relatively few institutions.
  - It also implies that for many institutions, endowments may produce little revenue relative to the institution’s total revenues.
- Endowment per full-time-equivalent student increased by nearly three-quarters (73 percent) in constant dollars between 1977 and 1987.
- Annual endowment earnings (in constant dollars) that were contributed to institutions’ current operating revenues increased over the ten-year period, 1977-87, by about two-thirds (64 percent).
  - At independent institutions the increase was 61 percent.
  - At public institutions the increase was 88 percent.
- Endowment earnings currently represent less than 5 percent of total operating revenues. In the public sector, endowment earnings accounted for only about one-half a percent of current funds revenues in 1987; in the independent sector, the comparable figure was 5.2 percent.
  - This implies that nationally, endowment income cannot be looked upon as a major source of funding to make up for shortfalls from other sources.

How Big Are Endowments
And Where Are They?

The estimated market value of college and university endowments at the end of fiscal year 1987 was $58.2 billion; at the end of FY 1986 it was $50.2 billion.
- Nearly all endowments (99 percent) were held by four-year institutions.
Four out of five endowment dollars are held by independent (nonpublic) institutions.
- In 1987, endowments at independent institutions were estimated at $47.7 billion.
- In 1987, endowments at public institutions were estimated at $10.5 billion (see table 1).

Endowments are heavily concentrated in relatively few institutions.
- The 100 institutions with the largest endowments—the "top 100"—represented about three percent of all institutions of higher education in the U.S. in 1987 and enrolled approximately 12 percent of the students. These institutions accounted for about 70 percent of all endowments.
- The twenty most heavily endowed institutions had endowments with an estimated market value of over one-half billion dollars each.
- The total market value of those twenty largest endowments in FY 1987 was $25 billion dollars and accounted for 43 percent of all endowments that year.
- Estimates for 1990 indicate that the market value of those twenty institutions had increased to $32 billion. Total national endowment data have not yet been published by the U.S. Department of Education for years subsequent to 1987.

A Decade of Growth

In the ten years prior to mid-1987 (the end of the fiscal year for most institutions), college and university endowments more than tripled in terms of current dollars, and, in terms of constant dollars, grew by 88 percent.

- At the end of FY 1977, endowments were estimated to be $16.3 billion.
- At the end of FY 1987, endowments were estimated at $58.2 billion current dollars, or $30.7 billion in 1977 constant dollars (chart 1).

The heavy concentration of endowments in the independent four-year sector—a concentration existing from the beginnings of higher education in this country—remained essentially constant during the decade of growth, but their size in both current and constant dollars increased.

- Independent four-year institutions accounted for 80 percent of all endowments at the end of FY 1977. It is estimated that at the end of FY 1987 they accounted for 81 percent.
- The market value of endowments at independent four-year institutions grew from $13.1 billion to an estimated $47.4 billion between 1977 and 1987, an increase of 260 percent.
- When the effects of inflation are removed by converting current dollars into constant 1976-77 dollars using the Consumer Price Index (CPI), the ten year increase is 91 percent.

Some leaders in the independent sector have expressed concern about growing competition from public sector institutions for contributors' dollars; but the available data from the National Center for Education Statistics (NCES) indicate that independent institutions have been successful in maintaining their share of total endowments for the twenty-seven years between 1960 and 1987.

- At the end of FY 1960, endowments at independent institutions represented 82.0 percent of endowments in all higher education institutions.
- At the end of FY 1987, endowments at independent institutions were estimated to represent 81.9 percent of the total.

### Table 1

Endowments at Colleges and Universities by Control of Institution, 1977-87

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>All Institutions</th>
<th>Public Institutions</th>
<th>Independent Institutions</th>
<th>All Institutions</th>
<th>Public Institutions</th>
<th>Independent Institutions</th>
<th>Percentage Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>20.744</td>
<td>3.709</td>
<td>17.035</td>
<td>15.692</td>
<td>2.806</td>
<td>12.886</td>
<td>17.9% 82.1</td>
</tr>
<tr>
<td>1981</td>
<td>23.464</td>
<td>4.150</td>
<td>19.314</td>
<td>15.905</td>
<td>2.813</td>
<td>13.092</td>
<td>17.7% 82.3</td>
</tr>
<tr>
<td>1983</td>
<td>32.691</td>
<td>5.826</td>
<td>26.865</td>
<td>19.541</td>
<td>3.483</td>
<td>16.059</td>
<td>17.8% 82.2</td>
</tr>
<tr>
<td>1984</td>
<td>32.976</td>
<td>6.038</td>
<td>26.938</td>
<td>19.015</td>
<td>3.482</td>
<td>15.533</td>
<td>18.3% 81.7</td>
</tr>
<tr>
<td>1985</td>
<td>39.916</td>
<td>7.344</td>
<td>32.572</td>
<td>22.146</td>
<td>4.075</td>
<td>18.072</td>
<td>18.4% 81.6</td>
</tr>
<tr>
<td>1986</td>
<td>50.281</td>
<td>9.088</td>
<td>41.193</td>
<td>27.128</td>
<td>4.903</td>
<td>22.225</td>
<td>18.1% 81.9</td>
</tr>
</tbody>
</table>

e Estimates

Chart 1
Endowments, by Control of Institution, 1977-87


Chart 2
Endowment per FTE Student in Public Institutions, 1977-87


Chart 3
Endowment per FTE Student in Independent Institutions, 1977-87

What Counts as Endowment?

Financial Accounting and Reporting Manual, the principal authority on college and university financial reporting published by the National Association of College and University Business Officers (NACUBO), indicates that endowment data usually include:

- Endowment, sometimes referred to as "true" endowment
- Term endowment
- Quasi-endowment or funds functioning as endowment

True endowment is composed of funds provided to the institution, the principal of which is not expendable by the institution under the terms of the gift or agreement that created the fund.

Term endowment is similar to true endowment, except that all or part of the funds may be expended after a stated period, or upon the occurrence of a certain event as stated in the terms of the gift.

Quasi-endowment—frequently referred to as "funds functioning as endowment"—are funds given to the institution "with no strings attached," or surplus funds that the governing board decided to add to the institution's endowment fund. The principal of these funds may be spent at the discretion of the governing board.

NACUBO reports the composition of the endowments in these categories each year in the report of its Endowment Study, which is published in its journal, NACUBO Business Officer. At the end of FY 1990, according to NACUBO's data, "true" endowment accounted for 66 percent of the endowment funds; quasi-endowment, 30 percent; and term and "other" endowment, 4 percent.

Some institutions may include "life income and annuity funds" in the totals of their reported endowment funds. A life income agreement is made with an individual who provides the institution with funds or property on the condition that he/she be paid the income earned by the assets donated for his/her lifetime. An annuity agreement is similar, but provides that a donor's gift is made available to the institution on the condition that the donor be paid specific amounts for a specific period.

NACUBO advises that the principal of life income and annuity funds not be included in an institution's endowment total for reporting purposes until the donor's death or the expiration of the agreement period. However, some institutions do include these funds in their reported endowment totals. In its annual listing of endowments, NACUBO currently excludes or lists separately such funds in those cases where they are specifically identified.

The Large Endowments

The list of the most heavily endowed institutions has not changed greatly during the 1977-87 decade. Of the 100 largest endowments listed by NCES for FY 1977, 90 were on the "top 100" list ten years later in 1987. It may be worth noting that, whereas 21 public institutions had appeared on the list in 1977, there were 19 on the list ten years later.

More recent data from the CFAE surveys indicate that at the very top, there is even greater stability. Although the CFAE publications do not provide total national estimates of all endowments—its surveys are strictly voluntary—its data are available more promptly than the government's and appear to be as inclusive of the largest endowments. Lists drawn from the CFAE data indicate the following:

At the top of the independent sector there has been little change in the last ten years.

- twenty-four of the "top 25" independent institutions in 1990 had been in the "top 25" in 1980.
- forty-nine of the "top 50" independent institutions in 1990 were among the "top 50" in 1980.
- In 1980, the "top 25" independent endowments had a market value of $9.0 billion, just over half (53 percent) of all independent endowments.
- In 1990, the "top 25" institutions had a market value of $28.3 billion. Inasmuch as NCES has not yet provided national or sectoral totals of higher education's finances for 1990, one cannot calculate now exactly what share of all independent endowments the $28.3 billion represented. In all likelihood, it will amount to about half.

At the top of the public sector there appears to have been a little more change than that shown among independent institutions.

- Nineteen of the "top 25" public institutions in 1990 had been in the "top 25" public institutions in 1980.
- Forty-three of the "top 50" public institutions in 1990 had been on the public "top 50" list in 1980.
- The "top 25" public endowments at the end of FY 1980 reported a total market value of $2 billion, slightly more than half (54 percent) the market value of all endowments at public institutions. This figure is essentially the same as the share of all independent endowments accounted for by the top 25 independent institutions that year.
- In 1990, the "top 25" public institutions had endowments with a market value of $13.2 billion.
- Data for the public sector are heavily affected by the fact that the endowment of the University of Texas is second only to Harvard University's. At the end of FY 1987, the most recent year for which national estimates are available from the NCES, the University of Texas system's $2.6 billion endowment accounted for one-quarter of the public sector's estimated $10.5 billion total. See the "Re-
end the tin 1987-88 decade saw a growth in total headcount enrollment of about nine percent, and in full-time-equivalent (FTE) enrollment of about five percent.

- Fall headcount enrollment increased from 11.0 million in 1976 to 12.5 million in 1986. (Note that financial data for a fiscal year relate to the enrollments counted in the previous year.)
- Fall FTE enrollment grew from 8.3 million in 1976 to 9.1 million in 1986.

This modest growth in enrollment occurred at a time when the value of endowments was more than tripling, with the result that the endowment-per-student figures also tripled during the decade.

- In FY 1977, endowment-per-FTE student for all institutions, public and independent, was approximately $1,960; in 1987 it had grown to about $6,420 (see table 2).

However, when these numbers are converted to constant 1977-78 dollars using the Consumer Price Index (CPI), the 1987 figure becomes $3,390, for a 73 percent increase over the 1977 level.

Endowment-per-student in the independent sector is much greater than at public institutions. This results, of course, from the larger endowments and smaller enrollments in that sector.

- In FY 1987, the independent sector endowment per FTE student was about $20,860.
- In the public sector, the comparable figure was about $1,550.

Growth in constant 1977-78 dollars over the ten-year period in the two sectors was generally parallel. In the independent sector, it was 64 percent; in the public, 66 percent.

Change in this measure has not been consistently upward during the ten-year period under consideration. Charts 2 and 3 show that the trend was slightly downward in constant dollar values early in the period — a time that included high inflation and two recessionary periods.

- Endowments per FTE student in constant dollars dropped in both the public and independent sectors from 1977-82 even as the current dollar figures were increasing.
- Endowment per FTE student in both current and constant dollars increased in the 1984-87 period.

Endowment Contributions
To Current Revenues

- Endowment earnings in recent years have represented only a small percentage of current operating revenues, i.e., current funds revenues, for all institutions. In FY 1977, endowment earnings amounted to $765 million, 1.8 percent of revenues.
- In FY 1987, endowment earnings had grown to $2.4 billion, 2.2 percent of all current funds revenues. These percentages are a far cry from the 13.2 percent that endowment earnings represented of total revenues in 1920. Twenty years later, in 1939-40, just before World War II, they contributed 10 percent to current funds. However, things have never been the same since then (see chart 4).
- By 1949-50 endowment earnings contributed 4.1 percent. This was at the end of the decade that saw the rapid growth in enrollments as a result of the GI Bill and concomitant increases in tuition and fees.
- In 1959-60, on the morrow of Sputnik and the eve of the expansion of the sixties, endowment earnings had grown to $207 million, but their share of current funds revenues had shrunk to 3.6 percent.
- In 1969-70 earnings represented 2.4 percent of current funds revenues. This was at the end of the decade that saw the establishment of many community colleges, most with no endowments, and the rapid expansion of public four-year institutions that accommodated much of the baby boom generation’s desire for higher education.

<table>
<thead>
<tr>
<th>Table 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endowment and Enrollment, by Control of Institution, 1977 and 1987</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>All Institutions</th>
<th>Public Institutions</th>
<th>Independent Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endowment*</td>
<td>$16,305</td>
<td>$58,199</td>
<td>$3,131</td>
</tr>
<tr>
<td>Endowment per FTE Student</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- in current dollars</td>
<td>$1,1961</td>
<td>$6,421</td>
<td>$493</td>
</tr>
<tr>
<td>- in constant 1976-77 dollars</td>
<td>$1,1961</td>
<td>$3,390</td>
<td>$493</td>
</tr>
</tbody>
</table>

* In millions.

Sources:
Since FY 1970, endowment earnings have represented around 2 percent of total current funds revenues.

Endowment earnings are most important in the independent sector.
- In 1977 endowment earnings at independent institutions were $667 million, or 4.7 percent of current funds revenues.
- By FY 1987, endowment earnings had grown to $2.0 billion, which represented 5.2 percent of current funds revenues.

In the public sector, endowment earnings are only a fraction of the independent institutions’ totals.
- In FY 1977 endowment earnings at public institutions were $98 million, or .3 percent of current funds revenues.
- By 1987 endowment earnings at public institutions had grown to $350 million which represented .5 percent of current funds revenues.

**Reporting Anomalies**

Many public colleges and universities have foundations that are set up separately from the institutions themselves. The extent to which their assets are included in reported endowment totals is not known.

- Of the 50 public institutions with the largest endowments at the end of FY 1989 as reported by CFAE, about half also have foundations.
- Of the fifty independent institutions with the largest endowments only two reported such foundations.

In National Association of College and University Business Officers (NACUBO) surveys, a number of the foundations have been listed separately from the sponsoring institution. Yet the fact that there are separate instrumentalities connected with many public institutions raises the question about the completeness of estimates of higher education’s total endowment.

A draft financial questionnaire that NCES proposes to use for reporting data for FY 1992 and later requests endowment data for the institution and, for the first time, “any of its foundations and other affiliated organizations.” Data from this questionnaire may permit confirmation of the accuracy of previously published figures, or it may indicate the need for reassessment of historical trends. The results of the questionnaire, however, will not be available for several years.

Other complexities in gathering endowment data include:
- the institutional level at which reporting is done;
- the extent to which systems consolidate their reports;
- the year-to-year consistency with which institutions consolidate—or disaggregate—their data.

In some years a large, complex public university system may report as one institution. In other years it may report its data by individual campus. Whereas this will make little difference for sectoral or national grand totals, it reduces the usefulness of the data for examining trends for more discrete institutional categories, such as research universities, comprehensive colleges, or liberal arts colleges.

**IMPLICATIONS**

- Endowments will probably continue to increase in the foreseeable future, despite downturns in the economy. However, endowment growth is affected by economic conditions, and one cannot assume that their “buying power” will be on an ever-upward trend.

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**Chart 4**

Endowment Earnings as a Percentage of Current Funds Revenues, FY 1920-90

![Graph showing endowment earnings as a percentage of current funds revenues from 1920 to 1990](chart.png)

- Estimate.
• The relative proportion of endowments held by institutions in the independent sector will not change drastically in the near future. Although there is a wide difference between the figures for the public and independent sectors, growth in both indicates continued development of higher education's financial infrastructure.

• Analysis of national data concerning endowment should take into consideration institutional type and control, and examination of trends will be most helpful when they make provision for changes in the value of the dollar and enrollment size.

• Planners and analysts at the national level should not expect income from endowment to be a major additional source of revenue in times of financial hardship. The heavy concentration of endowments in a relatively few institutions means that for most colleges and universities, public and independent, endowments and endowment earnings are negligible. On the other hand, for those institutions with sizable endowments, they are very important—sometimes critical—to the financial health of the institution.

• National financial data gathering should receive greater emphasis in the U.S. Department of Education. A wait of four to five years for national data concerning an important component of institutional finance means that timely identification of trends and their analysis will have to be made on the basis of incomplete and anecdotal data.

END NOTES:

Ten heavily endowed institutions/campuses that appeared on the 1977 "Top 100" list did not respond to the 1987 NCES endowment questionnaire or had their data consolidated into their parent's system report. Consequently they were omitted from NCES' printed list. For the purposes of this tally they have been returned to the list, and the ten institutions at the bottom of the NCES printed list were removed. Estimates of the endowment size of the added institutions were based on non-NCES data sources and/or an earlier year's data.

Lists of the "Top nn" institutions can also be created from data published by NACUBO and CPAE—and their data are more recent than NCES'. Although there is usually a great deal of overlap, there is no total agreement in either the amounts reported or in the reporting institutions or their components. Thus, caveats should be issued and caution exercised when discussing the composition of any listing of "Top" institutions.

3. In the discussion that follows, earnings and revenue data are from the NCES, and the current funds revenues figures represent totals for all institutions in a specified sector, not for just those institutions with endowments. If endowment earnings were shown as a percentage of revenues of only institutions with endowments, the percentages would have been somewhat higher.


REFERENCES AND SOURCES


NCES' Financial Statistics of Institutions of Higher Education was issued annually in various forms from the mid-1960s through 1979. In some years it was a single publication; other years it appeared in two to four volumes, each devoted to a separate aspect of higher education finance—current funds revenues and expenditures, property, student aid, physical plant. The comprehensiveness of each year's publication was usually related to how detailed the financial questionnaire was for the year.

The National Association of College and University Business Officers (NACUBO) publishes a monthly journal, NACUBO Business Officer, that includes for each year a summary of the results of the NACUBO endowment study—an activity that was begun in 1974. Participation in the survey is voluntary and the number of respondents varies each year. In 1985, 284 institutions participated; in 1990, the total was 387. In the early 1980s, the totals reported by this study represented between 80 and 84 percent of the national estimates provided by NCES. An advantage of this study is its timeliness. The results are usually published in the journal's February issue and include a list of reporting institutions. The major thrust of the NACUBO reports concerns the return produced by the endowments, not just their size. For information, contact the Financial Management Center, National Association of College and University Business Officers, Suite 500, One Dupont Circle, Washington, D.C. 20036. Telephone: 202-861-2500.

NACUBO's Financial Accounting and Reporting Manual
is a principal source for definitions of academic accounting terms and provides model formats for financial reports for colleges and universities.

The Council for Aid to Education (CFAE) annually publishes Voluntary Support of Education, which is derived from a survey of annual giving to colleges, universities, and schools. One item on its questionnaire gathers data on the market value of endowments. The CFAE survey, like NACUBO's, is voluntary and receives data from a varying number of institutions each year. Its reported totals have accounted for 85 to 97 percent of NCES' national estimates in recent years. The publication usually appears in the spring and contains listings of reporting institutions categorized by type of institution. Prior to 1989-90, the report was a single volume. In 1989-90 it was divided into two parts; (1) a national summary devoted primarily to trends in giving which shows amounts contributed to endowments by source (alumni, other individuals, corporations, etc.), degree of restriction, and type of institution, and (2) an institutional listing that shows the amounts received by each reporting institution, plus additional related statistical material including the market value of the endowment. Contact: Council for Aid to Education, Suite 2200, 51 Madison Avenue, New York, N.Y. 10010. Telephone: 212-689-2400.

The Council for the Advancement and Support of Education (CASE) published a directory in 1988, Profiles: Educational Institutions, as part of its activity as the National Clearinghouse for Corporate Matching Grant Information, an effort to assist corporations with their grant-making programs. For each responding CASE member the directory shows, among other items, (1) whether the institution has a foundation that is a legal entity registered with the IRS, (2) whether the foundation is controlled by the institution, and (3) whether it transmits all money to the parent institution. Contact: CASE, Suite 400, 11 Dupont Circle, Washington, D.C. 20036. Telephone: 202-328-5900.

The National Institute of Independent Colleges and Universities (NIICU) has published a very useful pamphlet, College and University Endowments, that is directed to the questions: What is an endowment? How is it created? How is it used? Why does it exist? Contact: National Institute of Independent Colleges and Universities, Suite 750, 122 C Street, NW, Washington, D.C. 20001. Telephone: 202-347-7512.

The Association of Governing Boards of Universities and Colleges (AGB) conducts conferences and publishes books and articles dealing with both the means and responsibilities of financial support for institutions of higher education. Its bimonthly AGB Reports contains articles from time to time concerning endowments and fund-raising. Contact: Association of Governing Boards, Suite 400, One Dupont Circle, Washington, DC 20036. Telephone: 202-296-8400.

BIBLIOGRAPHY


The ACE Research Briefs Series

The Division of Policy Analysis and Research at the American Council on Education publishes the ACE Research Brief Series, a collection of short papers exploring timely and pertinent issues in higher education. Current topics include trends in retention data and practices, academic collective bargaining, and international comparisons of higher education expenditures and participation. The series is published eight times a year and is available for $55 for one year, $100 for two years, or $140 for three years. ACE members receive a 10 percent discount.

Elaine El-Khawas, Vice President, Policy Analysis and Research
Cecilia Ottinger, Editor, Research Briefs Series

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