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HIGHLIGHTS OF THE 2003 NACUBO ENDOWMENT STUDY

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NACUBO is the National Association of College and University Business Officers, representing chief administrative and financial officers at more than 2,100 colleges and universities across the country. The annual NACUBO Endowment Study provides important information for evaluating the performance and management of institutional endowments. The study is the primary source of institutional endowment data in the U.S., providing a number of benchmarks for performance, asset allocations, spending policies, and other factors. The study is used by college and university officers to compare their policies and performance against peers, as well as by analysts in various other sectors. This article provides an overview of the 2003 study as well as an analysis of performance and trends in asset allocation over the past decade.

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>>> INTRODUCTION

Endowments play a very significant role in the financial life of colleges and universities. They may provide funding for numerous projects ranging from the construction of buildings to programs, faculty positions and scholarships. Particularly at private institutions, endowment spending often constitutes an important component of the operating budget. Many public institutions continue to struggle with declining state appropriations and need their endowments and foundations to help cover shortfalls. The extreme volatility of the financial markets in recent years has played havoc with endowments and has forced institutions to rethink spending policies with a goal of smoothing the spending distributions coming out of endowments so that the programs and projects they support can have more predictable sources of funding. Given the financial strains throughout the educational system, the investment management of endowments has reached a new level of importance and analysis.

First published in 1971 as the Comparative Performance Study, the NACUBO Endowment Study was originally based on a prior survey conducted by administrators at Dartmouth College. The earliest editions focused solely on investment performance, but in later editions the scope of the study has expanded to include many other aspects of endowment management. More than 700 colleges and universities participated in the most recent study covering the fiscal year 2003, which for most institutions ended June 30, 2003.

TIAA-CREF administered the study through online questionnaires, followed by data compilation and analysis. This report focuses on highlights of the study.

>>> PARTICIPATING INSTITUTIONS

The total value of all participating institutions' endowments as of the end of fiscal year 2003 was \$230 billion. As in the past, the 2003 study revealed significant concentration of assets, with the 39 largest endowments—those with more than \$1 billion in assets—representing 58% of total endowment dollars. More than half of the participating institutions had endowments valued at less than \$100 million. The mean endowment per institution was \$321 million, and the median was \$70 million.

For purposes of certain analyses, the NACUBO study provides data for six different groups of participants, based on the size of their endowments. Group 1 represents the largest endowments that are valued at greater than \$1 billion, while Group 6 represents the smallest endowments with values of less than \$25 million.

As Table 1 shows, the endowment dollars per student ranged from \$133,468 for institutions in Group 1 to \$2,959 in Group 6 with an average of \$35,424 for all participating institutions.

Table 2 lists participating institutions with endowments and foundations greater than \$1 billion, as of fiscal year 2003.

Table 1 Institution Groups by Endowment Size

Group	Endowment Size	Number of Institutions	% of Institutions	% of Total Endowment Dollars	Endowment per Student
1	>\$1 billion	39	5%	58%	\$133,468
2	\$501 million-\$1 billion	48	7	15	36,081
3	\$101 million-\$500 million	211	29	20	20,332
4	\$51 million-\$100 million	124	17	4	12,070
5	\$26 million-\$50 million	141	20	2	6,725
6	<\$25 million	154	22	1	2,959
Total	\$230 billion	717	100	100	35,424

Table 2 Institutions with Endowments Greater than \$1 billion As of Fiscal Year 2003

Institution	State	2003 Endowments (in thousands)
Harvard University	MA	\$18,849,491
Yale University	CT	11,034,600
Princeton University	NJ	8,730,100
University of Texas System	TX	8,708,818
Stanford University	CA	8,614,000
Massachusetts Institute of Technology	MA	5,133,613
University of California	CA	4,368,911
Columbia University	NY	4,350,000
Emory University	GA	4,019,766
The Texas A&M University System and Foundations	TX	3,802,712
University of Pennsylvania	PA	3,547,473
University of Michigan	MI	3,464,515
Washington University	MO	3,454,704
University of Chicago	IL	3,221,833
Northwestern University	IL	3,051,167
Duke University	NC	3,017,261
Rice University	TX	2,937,649
Cornell University	NY	2,854,771
University of Notre Dame	IN	2,573,346
Dartmouth College	NH	2,121,183
University of Southern California	CA	2,113,666
Vanderbilt University	TN	2,019,139
University of Virginia	VA	1,800,882
Johns Hopkins University	MD	1,714,541
Brown University	RI	1,461,327
University of Minnesota and Foundation	MN	1,336,020
Case Western University	OH	1,289,274
The Rockefeller University	NY	1,278,100
New York University	NY	1,244,600
Ohio State University and Foundation	OH	1,216,574
University of Pittsburgh	PA	1,156,618
California Institute of Technology	CA	1,145,216
University of Rochester	NY	1,127,350
Grinnell College	IA	1,111,615
University of Washington	WA	1,103,197
UNC at Chapel Hill and Foundations	NC	1,097,418
Williams College	MA	1,082,336
Purdue University	IN	1,056,767
Wellesley College	MA	1,043,476

	Public	Independent	All
Number of Institutions	230	487	717
% of Institutions	32%	68%	100%
Average Student Enrollment	20,456	3,635	9,047
% of All Students	72%	28%	100%
% of Total Endowment Dollars	28%	72%	100%
Endowment per Student	\$13,387	\$94,246	\$35,424

Table 3 shows that approximately two-thirds of the study’s participating institutions were independent, or private institutions, and one-third were public institutions. Similarly, the bulk of total endowment dollars was held at private institutions, 72%. However, the average student enrollment at public institutions, 20,456, was far greater than at private institutions, 3,635, which largely explains the enormous difference in average endowment dollars per student: \$94,246 at independent institutions and only \$13,387 at public institutions.

Besides endowment size, another way to categorize participating institutions is with the Carnegie Classification, which refers to the highest level of degree that is offered broadly at an institution. About 30% of NACUBO study’s participating institutions were from each of the following categories: doctoral/research institutions, master’s institutions, and baccalaureate institutions. The other 10% were from community colleges and specialized institutions. Doctoral/research institutions encompassed approximately 70% of all students in the study and about 73% of endowment dollars.

>>> PERFORMANCE AND INVESTMENT MANAGEMENT

In general, the larger endowments tend to have better investment performance than the smaller endowments, as indicated in Figure 1 that covers fiscal years ending June 1994 through June 2003. Group 1, representing endowments greater than \$1 billion, produced an annually compounded return of

11.5%, compared to an annualized return of 7.2% for the smallest endowment category.

Figure 2 illustrates the annual performance of the six groups, with the top line representing Group 1 and the bottom lines representing the smaller endowments. The year with the largest discrepancy in performance between the large and small endowments was 2000, when Group 1 endowments (greater than \$1 billion) earned an average of 27.7% while Group 6 endowments (less than \$25 million) earned an average of 7.8%. The very strong relative performance of large endowments in 2000 was due to their significantly greater allocations to alternative investments than those of small endowments.

For fiscal year 2003, the equal-weighted return for participating institutions was 3.0% and the dollar-weighted return—which gives greater weights to the large endowments—was 4.7%. The market recovery that began in the second calendar quarter of 2003 continued throughout the rest of the calendar year, but the performance of the latter half was not reflected in institutions’ June 30 fiscal results.

The fiscal 2003 returns for each of the groups were as follows:

Group 1	4.1%
Group 2	2.9%
Group 3	2.7%
Group 4	2.7%
Group 5	3.1%
Group 6	3.5%

Figure 1 Ten-Year Compound Returns by Groups (Equal-Weighted)

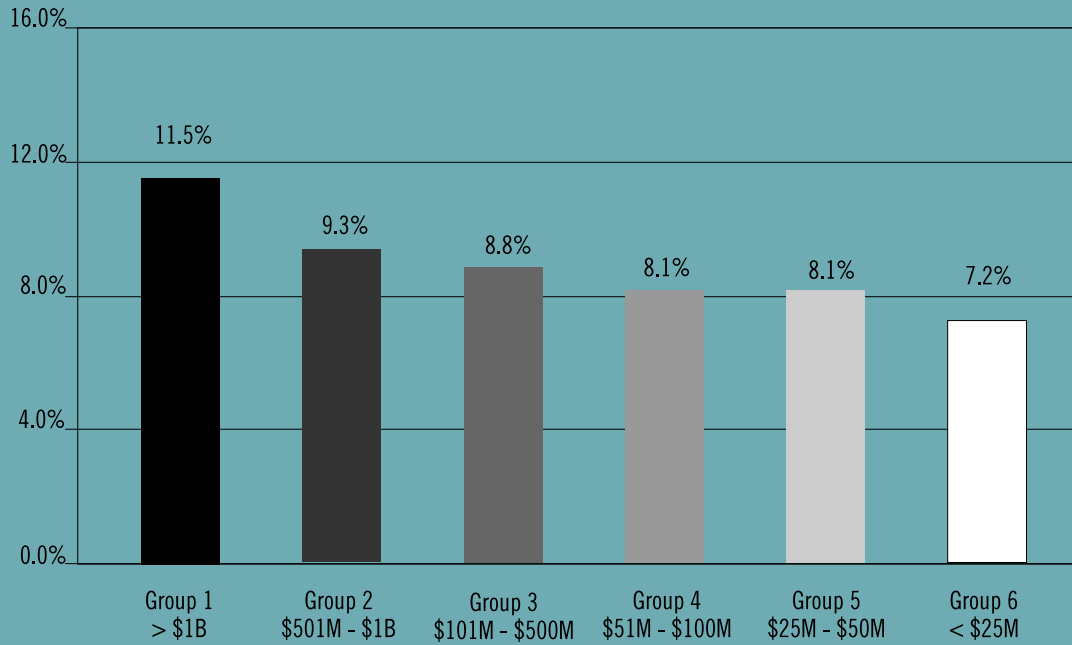


Figure 2 Annual Performance of the Six Groups

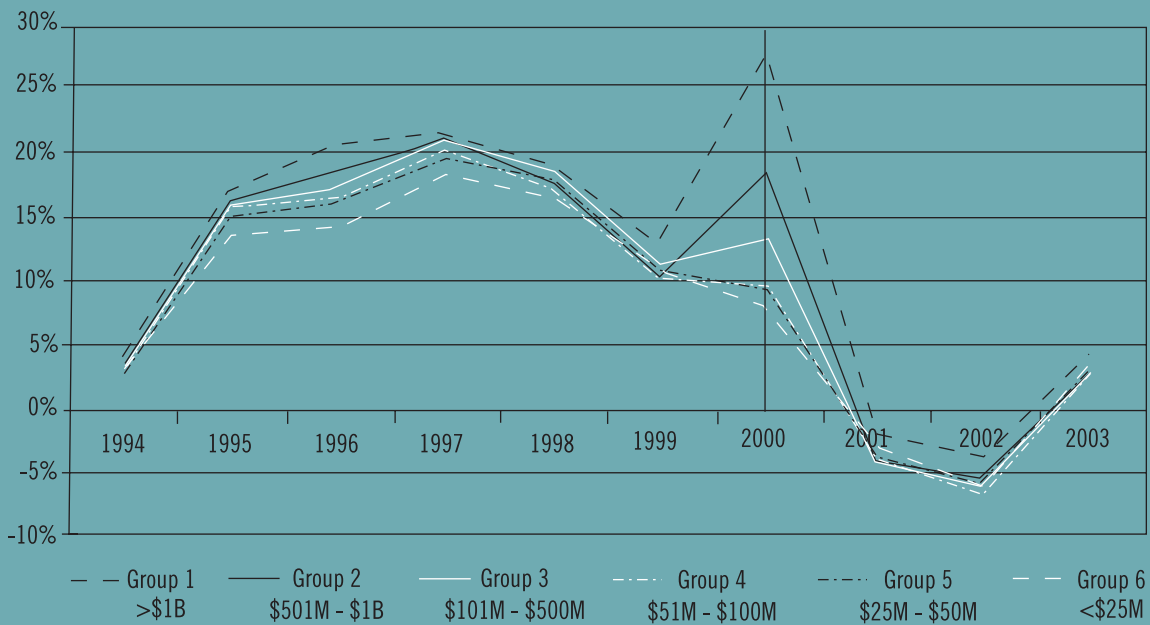
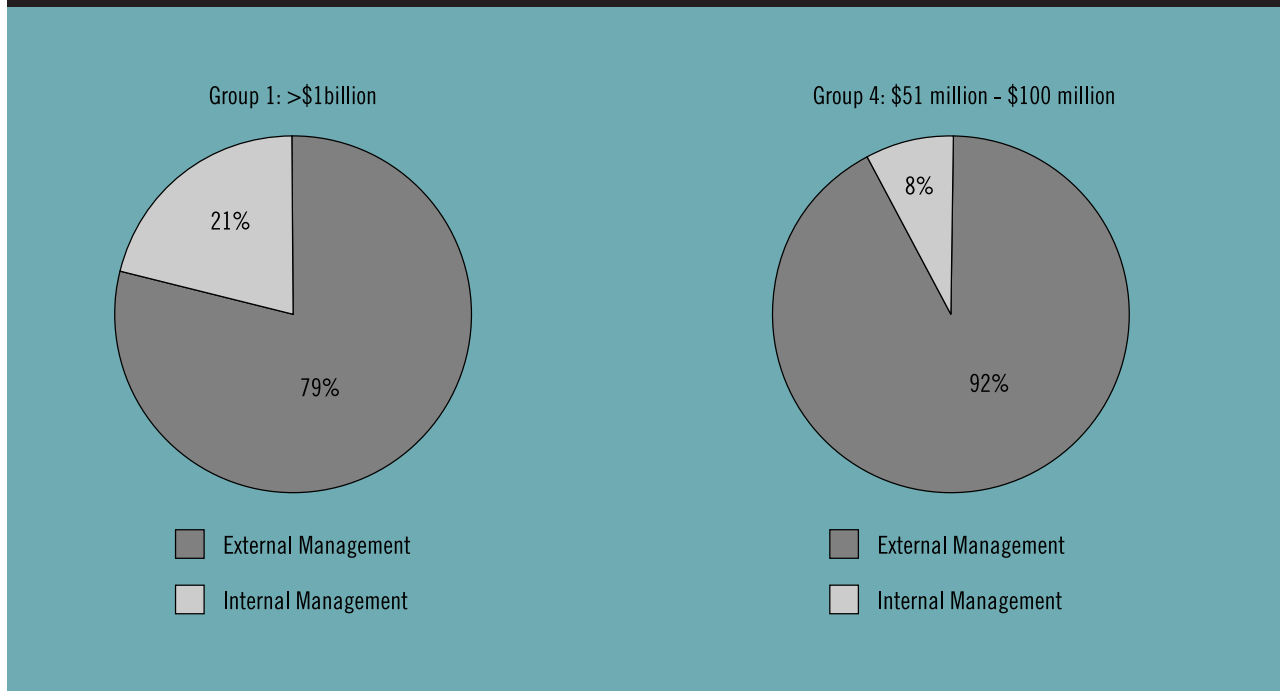


Figure 3 External vs. Internal Management



Over the same one-year period, the S&P 500 was up 0.3% and the Lehman Brothers Aggregate was up 10.4%. An index-based composite of 70% S&P 500 and 30% Lehman Aggregate would have returned 3.3% over that period, and a composite of 80% S&P and 20% Lehman Aggregate would have returned 2.3%. As noted, the average equal-weighted endowment recorded a 3.0% gain, commendable since it is reported after expenses (such as investment management and custody) whereas the indexes do not have those expenses.

For the first time, the 2003 study provides participating institutions' average performance by asset class, with foreign fixed income producing the best return of 13.5%, and venture capital producing the worst, -15.0%. The second worst category was private equity, -7.0%.

The study also provides information about the size of investment staffs at institutions, the percentage of institutions using outside consultants for investment guidance, and the percentages of endowment dollars that are managed internally versus externally. Not surprisingly, staff size is directly related to endowment size, with the largest endowments employing an average of five full-time investment professionals, with a

range of 1-35, while the smallest three groups employ an average of less than one full-time professional, with a range of 0-3. Only 45% of the largest (Group 1) endowments use outside consultants for investment guidance, whereas approximately 80% of most other groups use outside consultants.

Another big difference between large and small endowments is the degree to which assets are managed internally, as shown in Figure 3. In Group 1, representing the largest endowments, 21% of assets are managed internally, compared to only 8% for Group 4 of smaller endowments.

>>> ASSET ALLOCATIONS

Over the past decade, endowments generally have reduced their allocations to fixed income and have increased their allocations to alternative investments. In general, this trend has been more pronounced among the large institutions, which have considerably larger allocations to alternative investments and considerably smaller allocations to fixed income, cash, and traditional equities of stocks and stock mutual funds. Table 4 shows the fiscal 2003 allocations for

Table 4 Asset Class Composition by Groups (Equal-Weighted Percentages Inside Categories, 2003)

	Group 1	Group 4	Group 6
Equity	44.8%	58.7%	57.0%
Fixed Income	18.6	27.2	29.8
Real Estate	4.2	2.8	2.2
Cash	1.8	4.9	6.6
Hedge Funds	19.9	4.3	1.6
Private Equity	5.2	0.6	0.2
Venture Capital	3.0	0.3	0.1
Natural Resources	1.9	0.1	0.0
Other	0.7	1.1	2.5

Table 5 Asset Class Composition, 1993-2003 (Equal-Weighted Across All Participating Institutions)

	1993	1999	2003
Equity	53.0%	64.3%	57.1%
Fixed Income	34.9	23.6	25.9
Real Estate	2.1	2.0	2.8
Cash	7.4	4.0	4.0
Hedge Funds	0.7	3.1	6.1
Private Equity	0.2	0.8	1.3
Venture Capital	0.5	1.4	0.8
Natural Resources	0.3	0.2	0.4
Other	0.9	0.5	1.6

Groups 1, 4 and 6. Note that the largest endowments allocate 19.9% of their portfolios to hedge funds, compared to 4.3% for Group 4 and 1.6% for Group 6.

An analysis of equal-weighted asset allocations across all participating institutions indicates similar percentages to those found in Group 4 (assets of \$51 million

to \$100 million) or in Group 3 (assets of \$101 million to \$500 million). Over the past 10 years, the average endowment has undergone a gradual shift out of fixed income and cash and into alternative investments, as shown in Table 5. Traditional equity allocations rose significantly in the late 1990s and then declined in the

early years of this decade, in association with the equity market's rise and fall.

On a dollar-weighted basis as of June 30, 2003, alternative investments made up 22.3% of total endowment assets, or approximately \$51.2 billion out of the total \$230 billion, as shown below:

Hedge Funds:	\$31.0 billion
Private Equity:	8.7 billion
Venture Capital:	6.2 billion
Oil & Gas:	2.1 billion
Timber:	2.1 billion
Commodities:	1.1 billion

Within hedge funds, the strategies with the largest dollar allocations were long/short strategies, 25.1%; and absolute return strategies, 23.1%. The smaller endowments generally put the most dollars in a fund-of-hedge-funds approach.

Style allocations within the traditional equity class indicated a shift out of growth equities and into blend and value during the fiscal year ended June 30, 2003, as shown in Table 6.

The 2003 market capitalization allocations, which did not differ notably from the prior year, were as follows: large cap, 79.6%; mid-cap, 9.8%; small-cap, 9.9%; and micro-cap, 0.7%. Large-cap refers to companies whose stock market capitalization (stock price times the number of shares) is greater than \$5 billion; mid-cap, between \$1 billion and \$5 billion; small-cap, between \$250 million and \$1 billion; and micro-cap, less than \$250 million.

The study also provides information on the extent of passive (index-based) investing and the extent of socially responsible investing. An asset class where there are enormous differences in the sub-allocations between large and small endowments is fixed income, as shown in Table 7.

As shown, the smallest group of endowments, Group 6, allocates about half of its fixed-income dollars to corporate bonds, while the largest group of endow-

ments allocates only 10.4% to corporate bonds. On the other hand, the largest endowments allocate far greater portions of their fixed-income dollars to Treasuries, TIPs, and high-yield bonds. Within the "Other" category, the smaller endowments allocate substantially greater portions of their fixed-income dollars to agency bonds and to preferred investments than do the large endowments. (The "Diversified" category represents a mix of securities containing both corporate and government bonds but without any detail on percentages.)

With regards to passive investing, it's interesting to see that the largest endowments—including Groups 1 and 2—are most likely to use some level of indexing, but they are less likely than smaller endowments to use indexing for more than 35% of a portfolio.

Socially responsible investing tends to occur more often at independent institutions than at public institutions. About 21% of independent schools consider social responsible criteria whereas only 9% of public schools do. Among those institutions that screen, the most popular screening criteria are tobacco, alcohol, and gambling.

>>> ADDITIONS TO AND WITHDRAWALS FROM THE ENDOWMENT POOLS

Additions to and withdrawals from the endowment pools differ substantially on a dollar-weighted basis versus an equal-weighted basis, as shown in Table 8 for fiscal year 2003.

Note that the dollar-weighted percentages are lower for both additions and withdrawals than the equal-weighted percentages. This indicates that gift rates and spending rates generally represent smaller percentages of large endowments' assets than they do of smaller endowments. The rates listed are calculated as a percentage of the average of the fiscal year beginning and ending market values. The gift rate only represents a portion of total additions to pools. Other additions include price appreciation, income, inter-fund transfers and certain other items.

Table 6 Style Allocations within the Traditional Equity Class

	Value	Blend	Growth
Fiscal Year Ended June 30, 2003	20.9%	62.7%	16.4%
Fiscal Year Ended June 30, 2002	17.8	56.6	25.6

Table 7 Allocations within the Fixed Income Asset Class

Type	All, Dollar-Weighted	Group 1	Group 6
Diversified	37.1%	28.0%	23.4%
Corporate	20.5	10.4	49.9
Treasuries	18.1	29.0	8.4
TIPs	7.5	12.6	0.7
High-yield	8.4	11.4	1.9
Other	8.4	8.6	15.7
Total	100.0	100.0	100.0

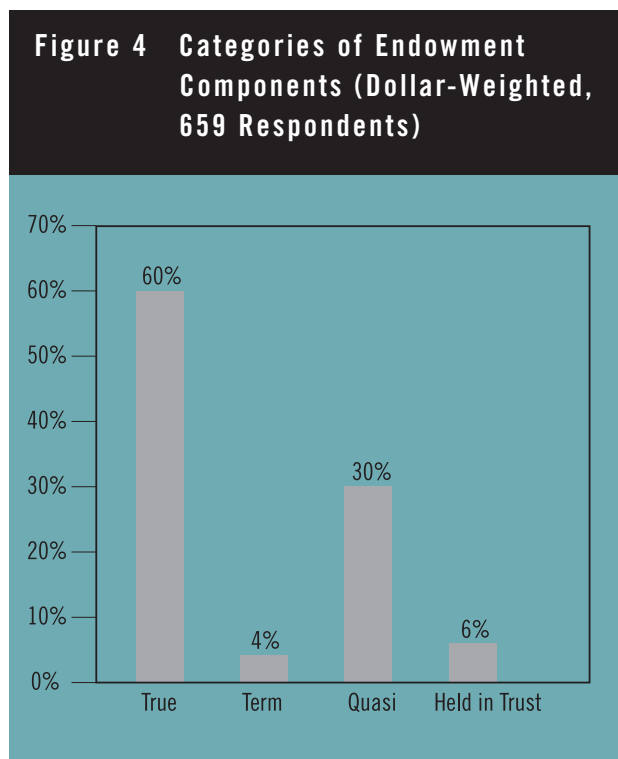
Table 8 Additions to and Withdrawals from the Endowment Pools for Fiscal Year 2003

	Dollar-Weighted	Equal-Weighted
Gift Rate	1.9%	5.6%
Spending Rate	3.6	5.3
Total Withdrawal Rate	4.7	7.6

>>> CATEGORIES OF ENDOWMENT COMPONENTS

The NACUBO study captures a considerable amount of other information regarding endowments, including an analysis of endowment components and restricted versus unrestricted assets.

Figure 4 breaks down endowments depending on whether principal can be spent at the discretion of the institutions' trustees. The study defines "true" endowments as those in which only returns on the gifts may be spent. The principal investment generally remains permanently invested in the endowment's investment pool. On the other hand, according to the study, "quasi" endowments allow spending of principal; they contain unrestricted gifts and offer far greater flexibility of spending. Term endowments allow spending of principal after the specified term has passed. Funds held in trust by others are administered by an external party, often a foundation. Significant differences exist between public and independent institutions with regards to restrictions on spending: approximately 82% of public institutions' assets are restricted, whereas only about 58% of private institutions' assets have restrictions (including both permanent and term).



>>> CONCLUDING REMARKS

The results of the NACUBO study for the fiscal year ended June 30, 2003 indicate a return to positive performance, following declines in 2001 and 2002, and a continuing commitment to alternative investments. Market declines that began in calendar 2000—and continued into early calendar 2003—took a toll on college and university endowments. Endowments shrunk not only because of market-induced losses, but also because of ongoing distributions for spending, and reductions in donor giving. Inflation, modest compared to many years, reduced the real value of endowments even further. Executives and administrators have been struggling with budgetary challenges as contributions from endowments to operating funds have dwindled along with endowment values. Many public institutions have been faced with declines in state appropriations. As a result of all of these financial difficulties, some institutions have resorted to substantial increases in tuition. In addition, some have started to consider different types of spending rules that can add more stability to distributions from endowments. The most commonly used spending rule is a rate of 5% based on the endowment's average market value over the previous 12 quarters. Other types of spending rules include expanding the 12 quarters to 20 quarters, increasing the annual distribution by a pre-set percentage or perhaps by the inflation rate, building reserves during bull markets, implementing a range of spending rates that would smooth distributions during both strong and weak markets. In sum, after a period of plentiful spending as the bull market raged in the late 1990s, college and university leaders have been faced with extremely difficult challenges and decisions that have required cutbacks in staffing, programming and capital improvements. Financial strains undoubtedly will remain for years to come. However, armed with greater wisdom about fiscal and investment management—and perhaps with continued improvements in the financial markets—institutions' financial officers may find the road ahead a bit smoother.

>>> ACKNOWLEDGEMENTS

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