



Memorandum

August 20, 2007

TO: Honorable Max Baucus, Chairman, Senate Committee on Finance
Honorable Chuck Grassley, Ranking Member, Senate Committee on Finance

FROM: Jane G. Gravelle
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SUBJECT: Tax Issues and University Endowments

This memorandum is in response to your request for a discussion on (1) the growth and uses of university and college endowments, which receive preferential tax treatment, and (2) the potential consequences for slower tuition growth and more student aid availability were a larger portion of endowment funds to be distributed and used for those purposes.

After a discussion of the value of the associated tax benefit, this memorandum provides an overview of endowments and their relationships to tuition and student aid, including aggregate data on endowments and returns, and supplementary aggregate data on tuition growth and student aid for institutions with over \$1 billion in endowments. Because of data constraints on investment returns, payout rates, tuition growth, and student aid by institution, the detailed analysis by individual institution is based on a judgmental sample of 30 non-profit universities and colleges: the 20 universities with the largest 2006 endowments and the 10 most heavily endowed four-year liberal arts colleges. Please note that the characteristics of these institutions cannot be generalized to other institutions.

The main findings of the analysis are summarized below:

- Endowment assets for 765 institutions summed to \$340 billion in the fiscal year ended in June 2006, with earnings of 15.3%, amounting to income of \$52 billion. The foregone revenue from not taxing these returns probably exceeds the revenue loss from all income tax deductions for charitable contributions to higher education.
- Endowment assets are heavily concentrated in a few institutions with large endowments. Harvard University's endowment alone represents 8.5% of total endowments of 765 institutions, and the five institutions with the largest endowments account for 25% of endowment value but comprise less than 1% of these institutions of higher education. Moreover, the top 20 universities account for almost half of all endowments but less than 3% of institutions, and the 62

institutions with endowments over \$1 billion are 8% of institutions but account for two thirds of endowment value.

- Institutions with larger endowments are characterized by higher (although more variable) returns and a larger share of the growing investment in hedge funds and private equity funds, but tend to have the same payout rates as institutions with smaller endowments. Average payout rates frequently fall below 5% even for institutions with very large endowments and very high rates of return. For many institutions with large endowments, the higher investment returns earned on endowments could allow higher payout rates while maintaining the real value of the endowment. These higher returns being earned appear, however, to be leading to greater growth in assets rather than higher distribution rates.
- For institutions with over \$1 billion in endowments, earnings on endowments retained after payout significantly exceed, on average, both tuition growth and undergraduate student aid. With each institution equally weighted, the return on endowments for these institutions was 15.2% in 2006, while the payout rate was only 4.6%. Tuition growth was 0.9% of the endowment, and student aid was 2.9% of the endowment.
- Among the top 20 institutions with the largest endowments, the endowment on a per undergraduate basis varies from \$2.8 million for Yale to \$33 thousand for the University of California system. Three of the top 20 (Yale, Harvard, and Princeton) have values of more than \$2 million per undergraduate, and three others (MIT, Stanford, and Rice) have more than \$1 million. The smallest amounts per undergraduate student were found in the five public institutions that fall in the top 20. Significant endowments per undergraduate student also occur in the 10 private four-year liberal arts colleges with the largest endowments in their group. (Note that endowments per student would be lower for institutions with graduate populations, but the amounts per undergraduate student may be more relevant if the goal is to reduce undergraduate tuition growth and undergraduate student aid. Yale, Harvard and Princeton would still have over \$1 million per capita with all students included, and MIT, Stanford, and Rice over \$0.5 million)
- For both the top 20 universities and the 10 liberal arts institutions, undergraduate tuition increases and student aid were small relative to endowment value: for the top five private universities (equally weighted), tuition growth was less than 1/10 of a percent of endowment value; for the top four undergraduate student aid was less than 1/2 of a percent of the endowment. For all private universities in the top 20, tuition growth was 0.27% of the endowment, while annual student aid was 1.4%. For the 10 liberal arts schools, tuition growth was 0.36% of endowment value and tuition growth was 2.2%. These numbers suggest that small additions from the endowment distribution could mitigate or eliminate tuition growth and substantially expand student aid for many of the institutions in the sample.
- Although the results are not as pronounced for the 62 institutions with over \$1 billion, in this case, as well, on average, increases in payouts could be used as a substitute for some or all tuition increases and could be used to increase student aid significantly, while endowments could continue to earn returns beyond those needed to maintain their real value.

At the conclusion of this memorandum, policy options to encourage greater spending from endowments for undergraduate tuition relief are discussed.

Tax Benefits for University Endowments

Charitable contributions that are not used immediately but rather are reinvested benefit from two forms of tax relief: the initial charitable deduction for the donor when the gift is made and the exemption from income tax of earnings on the assets. Foundations, which allow for the growth of assets, face a payout requirement of 5% of the asset value. These requirements for payout do not, however, apply to endowments.

The value of this tax benefit for higher education is significant, and probably exceeds the value of the charitable contribution deduction for higher education, estimated at \$4 billion in FY2006.¹ According to data covering 765 non-profit universities and colleges, the total amount of outstanding endowments as of mid-2006 was \$340 billion. The dollar-weighted rate of return was 15.3%.² The resulting income was \$52 billion, and if taxed at a 35% corporate income tax rate, would have resulted in \$18 billion in taxes, a benefit four and a half times the benefit of charitable deductions tax expenditures. Even adjusting this benefit to reflect netting out distributions, and for unrealized gains, the benefits of allowing endowments to earn untaxed income are most likely significant.

Higher Education Institutions: An Overview of Endowments, Payouts, and Investment Practices

For the 765 higher education institutions with data available on endowments, endowment assets are concentrated in large institutions, as shown in **Table 1**, which provides a distribution of endowments by asset size for the fiscal year ended June 30, 2006. As shown in the table, the 62 institutions with endowments over \$1 billion accounted for two thirds of the total endowment for 765 institutions. (The five institutions with the largest endowments accounted for a quarter of the total, and the top 20 for almost half). Institutions with larger endowments had higher rates of return on their endowment and also invested greater shares in the growing category of hedge funds and private equity funds. They were not, however, characterized by higher payout rates, which appeared to be fairly constant across institutions with different endowment sizes.

¹ The Joint Committee on Taxation estimates the tax expenditure for charitable giving for education at \$6 billion (*Estimates of Federal Tax Expenditures for Fiscal Years 2006-2010*, JCS-2-06, Apr. 25, 2006). According to *Giving USA 2006*, published by the American Association of Fund-Raising Counsel colleges and universities accounted for about two thirds of total giving to education.

² National Association of College and University and Business Offices, 2006 (NACUBO) Endowment Study, [<http://www.nacubo.org/x2376.xml>]. NACUBO represents over 2,100 institutions; NACUBO discusses their findings from the 765 participants as representative, suggesting that the remaining schools have negligible endowments. There are a handful of Canadian institutions in the survey, but they represent less than 4/10 of 1% of the endowment value.

Table 1: Endowment Characteristics by Size of Endowment, Fiscal Year 2006

Endowment Size 2006 (\$billions)	Share of Institutions (%)	Share of Endowment (%)	Rate of Return* (%)	Assets in Hedge Funds and Private Equity* (%)	Spending Rate* (% of Endowment)
> 1	8.1	67.4	15.2	28.3	4.6
0.5-1	8.2	16.0	12.8	22.5	4.5
0.1-0.5	29.0	13.8	11.9	14.9	4.6
0.05-0.1	18.7	2.9	10.0	8.7	4.7
0.025-0.05	15.8	1.4	9.3	6.5	4.9
<0.025	20.2	0.6	7.8	3.1	4.4
Public			10.0	9.0	4.3
Independent			11.1	12.7	4.8
Full Sample (Equal Weighted)	100.0	100.0	10.7	22.3	4.6
Full Sample (Dollar Weighted)			15.3		

Note: Data reflects 765 institutions, with a total of \$340 billion in endowment.

* Amounts are equal weighted, that is averaged over institutions rather than dollars, except where noted.

Source: Based on data from National Association of College and University Business Officers [<http://www.nacubo.org/x2376.xml>].

As indicated in **Table 2** and **Table 3**, rates of return vary over time and are sensitive to market conditions. Nevertheless, even when the lower return years during the 2001 and 2002 economic slowdown are included, the higher returns by institutions with larger endowments remain. These tables also show the growth in the share of assets allocated to investments in hedge funds and private equity funds, which have increased by over 50% since 2002 and may be partly responsible for these higher returns. (Note that dollar weighted returns would likely be higher than equal weighted within categories, given this trend of higher returns to institutions with larger endowments.)

Payout ratios have, however, shown little trend. Many institutions set a target (often of 5%) but apply it to a number of years (often 3) to smooth the spending. The decline in ratios most likely reflects not a decline in the target ratio, but a decline, and then a growth, in

endowment values. The payout ratio was 4.5% from 1997-1999, then gradually rose and fell.³ With endowments growing rapidly from high returns, this target approach would lead to a payout ratio consistently below the actual target.

This payout ratio can be contrasted with that of private foundations which are required to have a minimum distribution of 5%. On average, the payout ratio for private foundations averages 7%.⁴

Table 2: Rate of Return by Endowment Size and Time Period

Endowment Size 2006 (\$billions)	1-year* (%)	3-year* (%)	5-year* (%)	10-year* (%)
> 1	15.2	15.3	8.8	11.4
0.5-1	12.8	13.8	7.4	9.8
0.1-0.5	11.9	12.5	6.5	8.8
0.05-0.1	10.0	11.5	6.1	8.1
0.025-0.05	9.3	10.8	5.3	7.7
<0.025	7.8	9.0	4.5	7.4
Public	10.0	11.5	6.1	8.5
Independent	11.1	12.0	6.4	9.0
Full Sample (Equal Weighted)	10.7	11.9	6.7	8.8
Full Sample (Dollar Weighted)	15.3	15.6	9.2	11.7

* Amounts are equal weighted, that is averaged over institutions rather than dollars, except where noted. Source: Based on data from National Association of College and University Business Officers [<http://www.nacubo.org/x2376.xml>].

³ Data for years before 2002 is not available on the web site and was supplied by the National Association of College and University Business Officers.

⁴ Lynne Munson, "Robbing the Rich to Give to the Richest," *Inside Higher Ed*, July 26, 2007, at [insidehighered.com].

Table 3: Aggregate Rates of Return, Share of Assets in Hedge Funds and Private Equities, and Payout Rate, 2002-2006

Fiscal Year	Rate of Return (Dollar Weighted) (%)	Asset Share in Hedge Funds and Private Equities (Dollar Weighted) (%)	Payout Rate (Equal Weighted) (%)
2006	15.3	22.3	4.6
2005	13.9	20.5	4.7
2004	17.6	18.2	4.9
2003	4.7	17.3	5.1
2002	-4.2	14.3	5.0

Source: Based on data from National Association of College and University Business Officers [<http://www.nacubo.org/x2376.xml>].

Analysis of Endowments, Returns, Payout Ratios, Tuition Growth, and Undergraduate Aid for Universities and Liberal Arts Colleges with Large Endowments

This section of the analysis looks at the subset of institutions with large endowments. First, aggregate data on tuition growth and student aid are provided for the institutions with over \$1 billion in assets reported in the previous tables. For these institutions, as noted above, the return (with institutions equally weighted) is 15.2%, while payout ratio is only 4.6%. On average, existing endowments, therefore, grew by 10.6%, well in excess of inflation. (Total endowments grew more because of new contributions). At the same time, these institutions increased tuition by 6.8%, an amount equal to 0.91% of the endowment, and provided undergraduate student aid at 2.85% of the endowment.⁵ On average, therefore, additional distributions from the endowment could have been used to substitute for tuition increases and to allow a significant expansion of aid without reducing the real value of the endowment.

The analysis also provides institution level data for the 20 institutions with the largest endowments in 2006. The analysis also considers the 10 four-year liberal arts colleges with the largest endowments in their group. The selected groups are chosen for the individual institution analysis because of difficulty in obtaining institution level data on payouts, returns, tuition and aid in current data bases.

⁵ Public institutions data reflect in-state tuition increases, but applied to all students. Tuition increases, and student aid constructed from data in U.S. Department of Education, National Center for Educational Statistics, College Opportunities Online Locator; data for university systems include all campuses with undergraduate enrollment: [<http://nces.ed.gov/ipeds/cool/index.aspx>]. These tuition increases and student aid averages exclude the University of Toronto (a Canadian university) and Rockefeller University (with no undergraduates) and combine Purdue University and Indiana University.

Table 4 lists the institutions in the top 20, their endowments, their share of total endowments, and their average endowment per undergraduate and per student.⁶ These 20 institutions account for less than 3% of institutions, but 48% of endowment value. The top 5 institutions account for less than 1% of institutions but 26% of endowments.

Note that perhaps a better metric of the endowment size when one is concerned with undergraduate tuition relief is the endowment per undergraduate. As shown in the table, while Harvard has the largest total endowment, Yale has the largest endowment per undergraduate: \$2.8 million. The endowment per undergraduate varies from \$2.8 million for Yale to \$33 thousand for the University of California systems. Three of the institutions in the top 20 (Yale, Harvard, and Princeton) have values of more than \$2 million per undergraduate, and three others (MIT, Stanford, and Rice) have more than \$1 million. The smallest amounts per student are in the five public institutions that fall in the top 20 institutions. For considering the overall size of endowment needs, endowment per student, which includes graduate students, may be a better measure. As shown in Table 4, the per capita endowment is much smaller in some cases, and the order changes. Three institutions (Harvard, Yale, and Princeton) still have endowments in excess of \$1 million per student.

⁶ Data on undergraduate enrollment is from U.S. Department of Education, National Center for Educational Statistics, College Opportunities Online Locator; data for university systems include all campuses with undergraduate enrollment, [<http://nces.ed.gov/ipeds/cool/index.aspx>].

Table 4: Endowments of the 20 Institutions with the Largest 2006 Endowments

Institution	Endowment (\$ billions) 2006	Share of Total Endowments 2006 (%)	Endowment per Undergraduate 2005 (\$ thousands)	Endowment per Student 2005 (\$thousands)
Harvard	28.9	8.5	2,619	1,018
Yale	18.0	5.3	2,814	1,326
Stanford	14.1	4.1	1,856	641
U. of Texas	13.2	3.9	94	72
Princeton	13.0	3.8	2,354	1,655
MIT	8.4	2.5	1,651	658
Columbia	5.9	1.7	709	236
U. of CA System	5.7	1.7	33	25
U. of Michigan	5.7	1.7	158	90
Texas A&M	5.6	1.7	77	60
U. of Pennsylvania	5.3	1.6	361	184
Northwestern	5.1	1.5	232	233
Emory	4.9	1.4	672	360
U. of Chicago	4.9	1.4	896	292
Washington U.	4.6	1.4	572	319
Duke	4.5	1.3	585	272
Notre Dame	4.4	1.3	441	320
Cornell	4.3	1.3	276	192
Rice	4.0	1.2	1,160	709
U. of VA	3.6	1.1	199	125

Source: Data on endowments from National Association of College and University Business Officers [<http://www.nacubo.org/x2376.xml>]. Data on undergraduate enrollment is from Institute for Educational Statistics, National Center for Educational Statistics, College Opportunities Online Locator; data for university systems include all campuses with undergraduate enrollment: [<http://nces.ed.gov/ipeds/cool/index.aspx>].

Although the liberal arts institutions in **Table 5** account for only 3.5% of endowments, they had relative high endowments per student. Out of the 10 institutions in our sample, 7 had endowments in excess of over \$500,000 per student.

Table 5: Endowments of 10 Liberal Arts Colleges with the Largest Endowments

Institution	Endowment (\$ billions)	Share of Total Endowments (%)	Endowment per Undergraduate (\$ thousands)
Grinnell	1.5	0.43	881
Williams	1.5	0.43	661
Pomona	1.5	0.43	847
Wellesley	1.4	0.42	518
Amherst	1.3	0.39	716
Swarthmore	1.3	0.37	787
Smith	1.2	0.34	334
Berea	0.9	0.28	540
Middlebury	0.8	0.23	294
Vassar	0.7	0.22	282

Source: Data on endowments from National Association of College and University Business Officers [<http://www.nacubo.org/x2376.xml>]. Data on undergraduate enrollment is from Institute for Educational Statistics, National Center for Educational Statistics, College Opportunities Online Locator; data for university systems include all campuses with undergraduate enrollment: [<http://nces.ed.gov/ipeds/cool/index.aspx>].

Table 6 and **Table 7** show, for the same institutions, the recent growth rates in endowments, the rates of return and asset allocation for most institutions and the payout rates. In a steady state which would maintain endowment size relative to spending with real income and population growth, the endowment would grow at approximately the rate of national output. As the table indicates, in almost every case endowments are growing much faster than nominal GDP, which grew at 6.9% through the comparable 2005-2006 period and at 6.0% through the comparable 2004-2005 period. Yale University, for example, with the largest endowment per undergraduate, had a growth approximately three times the growth of national output, while Harvard, with the next largest, had a growth rate more than twice as large. Even if the growth rate for comparison were to be increased by the difference between the GDP deflator and the privately-generated Higher Education Price Index (HEPI),⁷ which reflects the composition of college costs, these comparison rates would be increased only by 1.7 and 0.8 percentage points.

⁷ See [<http://www.commonfund.org/Commonfund/Investor+Services/HEPI.htm?m=h&AA=2>] for a discussion of the HEPI index. HEPI, unlike common price indices, is not adjusted for quality.

Table 6: Growth Rates, Returns and Payout Rates of the 20 Institutions with the Largest 2006 Endowments

Institution	Growth Rate, 2005-2006 (%)	Growth Rate 2004-2005 (%)	Return, 2004-2005 (%)	% Hedge Funds and Private Equities	Payout Rate 2003-2004, unless noted (%)
Harvard	13.5	15.0	19.2	21.1	4.5
Yale	18.4	19.4	22.3	36.5	4.5
Stanford	15.4	23.9	19.0*	10.0*	4.6
U. of Texas	14.0	12.3			5.5
Princeton	16.4	12.9	17.0	37.9	4.1
MIT	24.7	14.4	17.6		5.4
Columbia	14.4	15.5	17.7	45.0	4.9
U. of California	9.8	9.5	10.3	1.3	4.1
U. of Michigan	14.6	18.4	19.1	27.4	4.2*
Texas A&M	13.7	13.5			5.6
U. of Pennsylvania	21.6	8.7	8.5	20.1	4.6*
Northwestern	22.0	14.9	15.6*		4.5*
Emory	11.3	-3.5			6.1
U. of Chicago	17.6	14.3	18.8	29.0	4.1*
Washington U.	9.8	6.7	10.0	23.6	4.4*
Duke	17.6	15.5	18.1		4.8*
Notre Dame	21.4	17.9	19.1		3.5*
Cornell	14.4	16.6	13.6	28.7	5.2*
Rice	10.4	9.3	13.6	26.9	4.4*
U. of VA	12.4	15.2	14.3	67.3	4.5*

* Asterisked data are from data in annual reports. Stanford had a return of 19.5% in the most recent year and a return of 19% over the past three years. Northwestern's return is for the most recent year, the average of the past three years is 17.1%. Payout rates for the University of Pennsylvania, University of Michigan, Duke, and Notre Dame are for FY2005; those for Northwestern, Chicago, Rice, and Virginia are for FY2006. Data on growth of endowments is from National Association of College and University Business Officers [<http://www.nacubo.org/x2376.xml>]; data on rate of return and asset distribution are from *The Chronicle of Higher Education; The Chronicle of Philanthropy: Endowments at Non-Profits Organizations, Year Ending June 30, 2005*; data on payout rates are from a study commissioned by the Wall Street Journal and reported in John Hechinger, "When \$26 Billion is Not Enough," *Wall Street Journal*, Dec. 17, 2005.

Table 7: Growth Rates, Returns and Payout Rates of the 10 Liberal Arts Colleges with the Largest 2006 Endowments

Institution	Growth Rate, 2005-2006 (%)	Growth Rate 2004-2005 (%)	Return 2004-2005 (%)	% Hedge Funds and Private Equities	Payout Rate 2003-2004 (%)
Grinnell	5.8	7.6	10.7	31.8	4.0
Williams	8.4	9.7	12.4	33.2	4.8
Pomona	12.2	8.1	12.8	22.7	3.7
Wellesley	10.7	13.0	11.5	14.6	5.7
Amherst	15.8	16.2	19.3	41.4	4.1
Swarthmore	7.0	7.8	10.8	16.5	4.5
Smith	11.7	12.0	16.1*	46.0*	5.6
Berea	10.1	8.4	10.8*		5.2
Middlebury	8.4	8.6			5.8
Vassar	10.4	10.5	13.6*		5.9

* Asterisked data are from data in annual reports . Data on growth of endowments is from National Association of College and University Business Officers [<http://www.nacubo.org/x2376.xml>]; data on rate of return and asset distribution is from The Chronicle of Higher Education; The Chronicle of Philanthropy: Endowments at Non-Profits Organizations, Year Ending June 30, 2005; data on payout rates are from a study commissioned by the Wall Street Journal and reported in John Hechinger, "When \$26 Billion is Not Enough," *Wall Street Journal*, Dec. 17, 2005.

For the universities, three quarters had payout rates less than 5%, falling below the mandated payout rate for private foundations. To some degree, this payout may occur because many institutions use a 5% target, but apply it over the average of the last three years. For example, if the endowment is growing by 15% a year, 5% over the three year average will be only 4.3% of the current value. To obtain a 5% rate relative to the current market, the target should be increased to 5.8%. In fact, Duke University has a 5.5% target. In contrast, the University of Michigan announced last year that it is gradually shifting its three year average to a seven year average; with 15% growth and a 5% target, that rule would lead to a payout rate of less than 3%.

Traditionally, the argument for setting the payout rate is to preserve the real value of the endowment. Both because of the higher returns that have been earned and because of this general problem with an averaging rule, the payout rates are low compared to earnings. For example, if the typical payout rate is 4.5% and the return 15%, the value of existing endowments increases by 10.5%, outstripping not only the standard economy wide inflation rates (using the GDP deflator) of around 3% but also the HEPI which ranged between 3.6% and 5.0% in 2004-2006. This growth in real value combined with new contributions to endowments has resulted in growth rates in endowment balances that far exceed GDP growth rates in most cases.

Table 8 and **Table 9** provide data that relate the endowment size to two expenditures related to undergraduate student costs: tuition increases and undergraduate aid. For tuition increases for public schools, the increase in in-state tuition is applied to all students (i.e., resident and non-resident students), so actual increases may be somewhat larger for these institutions. They also show the percentage increases in in-state tuition growth. (Tuition includes fees). Data to prepare a weighted average of in-state and non-resident tuition are not readily available.

For both the top 20 institutions and the 10 liberal arts institutions, undergraduate tuition increases and student aid were small relative to the endowment: for the top five private universities (equally weighted), tuition growth was less than 1/10 of a percent of the endowment; for the top four institutional undergraduate student aid was less than 1/2 of a percent of the endowment. That is, if these institutions distributed on average slightly over one half of one percent of their endowment in addition to their current distribution, they could eliminate all tuition increases and double undergraduate aid. (Undergraduate aid refers to grants.)

For all private universities in the top 20, tuition growth was 0.27% of the endowment, while total student grants provided by the institution was 1.4%. For the 10 liberal arts institutions, tuition growth was 0.36% of endowments and student aid was 2.2%.

Although growth rates for public in-state tuition are also reported, the tuition growth rate in tuition for public institutions is more difficult to interpret, not only because of out-of-state tuition, but also because of the effects of state funding. For private universities the growth rate in tuition was 5.8%. This rate was above the approximately 3% inflation rate in the economy, but only somewhat above the Higher Education Price Index value of 5%. (Note that private institutions had tuition increases the previous fiscal year that were similar, 5.9%, but well above the HEPI rate of 3.6%). The liberal arts colleges had similar growth rates.

These numbers suggest that, for the sample considered, small additional distributions from institutions' endowments could mitigate or eliminate tuition growth and substantially expand student aid for many institutions while these institutions could continue to have endowments that significantly outpace those necessary to maintain the real and relative values.

Table 8: Tuition Increases and Undergraduate Aid as Percent of the Endowment of the 20 Institutions with the Largest 2006 Endowments

Institution	Undergraduate Tuition Increases as a % of Endowment 2005-2006	Undergraduate Institutional Aid as a % of Endowment, 2004-2005	Percentage Increase in Tuition, 2005-2006
Harvard	0.06	0.45	5.0
Yale	0.06	0.33	5.0
Stanford	0.10	0.42	5.8
U. of Texas	0.63	0.95	10.9
Princeton	0.07	0.50	4.9
MIT	0.08	0.79	4.0
Columbia	0.27	1.15	5.8
U. of California	0.16	7.95	0.8
U. of Michigan	0.32	1.31	5.8
Texas A&M	0.36	1.37	5.2
U. of Pennsylvania	0.50	2.21	5.5
Northwestern	0.69	3.74	5.1
Emory	0.25	1.23	5.6
U. of Chicago	0.19	1.12	5.4
Washington U.	0.31	1.56	5.5
Duke	0.27	1.55	4.8
Notre Dame	0.43	2.32	6.0
Cornell	0.55	2.47	4.8
Rice	0.28	0.64	13.6
U. of VA	0.33	0.93	9.3

Public institutions data reflect in-state tuition increases, but applied to all students. Data on endowments from National Association of College and University Business Officers [<http://www.nacubo.org/x2376.xml>] Data on undergraduate enrollment, tuition increases, and student aid constructed from data in U.S. Department of Education, National Center for Educational Statistics, College Opportunities Online Locator; data for university systems include all campuses with undergraduate enrollment: [<http://nces.ed.gov/ipeds/cool/index.aspx>].

Table 9: Tuition Increases and Undergraduate Aid as Percent of the Endowment of the 10 Liberal Arts Colleges with the Largest 2006 Endowments

Institution	Tuition Increases as a % of Endowment 2005-2006	Institutional Aid as a % of Endowment, 2004-2005	Percentage Increase in Tuition, 2005-2006
Grinnell	0.17	1.49	5.6
Williams	0.29	1.56	6.1
Pomona	0.23	1.42	6.5
Wellesley	0.33	2.27	5.5
Amherst	0.26	1.68	5.8
Swarthmore	0.22	1.48	5.4
Smith	0.54	4.00	5.9
Berea	0.05	3.64	NA
Middlebury	0.74	1.12	5.2
Vassar	0.80	3.58	6.7

Public schools data reflect in-state tuition increases, but applied to all students. Data on endowments from National Association of College and University Business Officers [<http://www.nacubo.org/x2376.xml>] Data on undergraduate enrollment, tuition increases, and student aid constructed from data in Institute for Educational Statistics, National Center for Educational Statistics, College Opportunities Online Locator; data for university systems include all campuses with undergraduate enrollment: [<http://nces.ed.gov/ipeds/cool/index.aspx>].

Policy Options to Increase Endowment Payout for Tuition Relief

There are a number of approaches that might be used to encourage or require institutions with large tax-favored endowments to distribute endowments. Note that this discussion focuses solely on potential methods to increase distributions or reduce undergraduate tuition, and does not address the desirability of doing so or the effects on other variables such as the composition of student enrollment or the effects on students over time.

Disseminating better information on what higher education institutions are doing with their endowments, along the lines contained in this memorandum, could be helpful. Such information might inform contributors about where resources are being used and pressure higher education institutions to address issues of public concern such as high tuition rates.

Such information is currently voluntary, not always available, and not available in an accessible form. Nor are measures in place to assure that data are accurate and consistent. For example, although data on endowment size, growth, payout, and asset allocation are collected by the National Association of College and University Business Officers and some data are posted on their web site for the public, they do not make institution level data publicly available and historical aggregate data requires a purchase. To obtain the data for

the 30 institutions in this analysis was time-consuming, required accessing many different sources, and collecting and calculating the information data point by data point. It also relied entirely on voluntary reporting by these institutions either in their annual reports or to a private association in some cases .

The Internal Revenue Service proposed changes in Schedule D of the 990 form filed by tax exempt organizations that should provide additional information on endowment payouts that could be useful in monitoring how endowments are being used. However, although the 990 is publicly available, it is not easily accessible and thus while it might be helpful for tax administrators and scholars, it would not help much in making data easily accessible to the public, where the spotlight of publicity might have an effect. One possibility would be to require the types of information reported in this memorandum to be reported to a central government agency (such as the IRS or the Education Department) and then posted on the Internet in an easily accessible form. For example, the U.S. Department of Education maintains a publicly accessible on-line data base (College Opportunities On-Line, or COOL) of all institutions of higher education that participate in the federal student aid programs authorized by Title IV of the Higher Education Act. Data on institutions' endowments could be added to that data set and all relevant data provided by institution could be presented in an accessible table (sorted in various ways, such as by alphabet, state, and endowment size).⁸ These data could be posted on both the IRS and Education Department web sites. Such approaches to transparency of information are already being made with respect to hospital costs and quality, and providing this information would be a much simpler process.

Instead of, or in addition to, making more information available, tax penalties could be used to require institutions to distribute more of their endowment or to restrain growth in tuition, which might be accomplished with funds from the endowment. These approaches fall into several categories.

The first would be to require an annual payout rate, similar to the requirements imposed on private foundations, to qualify for exemption or to avoid an excise tax on the endowment. The rate could be set at the private foundation rate, or it could be set higher. Even if set at 5% it would likely increase payouts because of the common practice of applying a payout rate to an average of several previous years. Since the terms of endowments are often to preserve the corpus, the required distribution could be capped so that it would not exceed earnings from the endowment.

One could also argue that the standard for an appropriate distribution level is not the payout rate, but the earnings rate. For example, a minimum payout rate could be the return minus a cost of living allowance (which could be set at the HEPI index level). Or, since these institutions (unlike foundations) have on-going contributions, distributions could be required so that the growth rate is equal to GDP growth plus the difference in the HEPI index rate and the GDP deflator. This approach should preserve the real value of the endowment relative to population and income growth.

Taxes could also be imposed on endowments if institutions increased their tuition by more than an appropriate rate such as inflation, or the HEPI index, or CPI plus an addition. For institutions with large endowments the tax could easily be small and yet induce institutions to cut back tuition increases. For example, for FY2007, the HEPI was only

⁸ U.S. Department of Education Institute for Educational Statistics, National Center for Educational Statistics, College Opportunities Online Locator, [<http://nces.ed.gov/ipeds/cool/index.aspx>].

3.4%. Recall that a tuition increase for Harvard was only 0.1% of its endowment, so it would clearly prefer to limit tuition increases rather than be exposed to even a small endowment tax. Such approaches would probably also have to extend to room and board, to prevent increasing these payments as a substitute.

These types of restrictions could also be applied simultaneously.

One possible approach to target such a tax and make it less intrusive on smaller institutions would be to apply the regime only to institutions that have endowments per undergraduate student greater than some floor. One could also tie the endowment distribution to undergraduate tuition. For example, one could impose an excise tax of 1% of assets for institutions above the floor, which they could avoid by distributing at least 6% of their endowment (a regular 5% plus an additional 1%) with the 1% being used reduce tuition (and fees) or increase the share of aid, or both. Such a method could set a base year, and permit an inflation adjustment to that base (again limiting room and board growth as well to prevent a backdoor increase in student revenues). If tuition fell to zero, the school would not be subject to a tax as long as its room and board did not grow faster than CPI (this restriction would be needed to deal with a school like Berea which basically provides a free ride). One could set the endowment floor based on the number of undergraduates, or could include graduate students in the count.

Please contact me at 7-7829 if you have further questions.