College and University Endowments: Overview and Tax Policy Options

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Summary

Colleges and universities maintain endowments to directly support their activities as institutions of higher education. Endowments are typically investment funds, but may also consist of cash or property. Current tax law benefits endowments and the accumulation of endowment assets. Specifically, endowment fund earnings are exempt from federal income tax. Additionally, taxpayers making contributions to college and university endowment funds may be able to deduct the value of their contribution from income subject to tax. The purpose of this report is to provide background information on college and university endowments, and discuss various options for changing their tax treatment.

This report uses data from the U.S. Department of Education, the National Association of College and University Business Officers (NACUBO) and Commonfund Institute, and the Internal Revenue Service to provide background information on college and university endowments. Key statistics, as discussed further within, include the following:

- **In 2014, college and university endowment assets were $516.0 billion.** Endowment assets have been growing, in real terms, since 2009. Endowment assets fell during the 2007-2008 financial crisis, and took several years to fully recover.
- **Endowment assets are concentrated, with 11% of institutions holding 74% of all endowment assets in 2014**. Institutions with the largest endowments (Yale, Princeton, Harvard, and Stanford) each hold more than 4% of total endowment assets.
- **The average spending (payout) rate from endowments in 2014 was 4.4%**. Between 1998 and 2014, average payout rates have fluctuated between 4.2% and 5.1%. In recent years, institutions with larger endowments have tended to have higher payout rates.
- **In 2014, endowment assets earned a rate of return of 15.5%, on average**. Larger institutions tended to earn higher returns. Larger institutions also tended to have a larger share of assets invested in alternative strategies, including hedge funds and private equity.

Changing the tax treatment of college and university endowments could be used to further various policy objectives. Current-law tax treatment could be modified to increase federal revenues. The tax treatment of college and university endowments could also be changed to encourage additional spending from endowments on specific purposes (tuition assistance, for example).

Policy options discussed in this report include (1) a payout requirement, possibly similar to that imposed on private foundations, requiring a certain percentage of funds be paid out annually in support of charitable activities; (2) a tax on endowment investment earnings; (3) a limitation on the charitable deduction for certain gifts to endowments; and (4) a change to the tax treatment of certain debt-financed investments in strategies often employed by endowments.

Contents

Figures

Tables

Appendixes

Contacts

In recent years, the size and growth of college and university endowments has attracted the attention of academicians and policymakers.[1] In 2008, Senator Chuck Grassley and Representative Peter Welch convened a roundtable discussion entitled "Maximizing the Use of Endowment Funds and Making Higher Education More Affordable."[2] More recently, discussion of endowments featured heavily in a House Ways and Means Committee hearing on "The Rising Costs of Higher Education and Tax Policy."[3] The purpose of this report is to provide background information on college and university endowments, and discuss various options for changing their tax treatment. The report will not discuss endowments in the context of the cost of higher education, although its contents may help inform those debates.

At the end of FY2014, endowment balances for the 832 institutions included in the National Association of College and University Business Officers (NACUBO)-Commonfund Study of Endowments totaled $516.0 billion.[4] In inflation-adjusted terms, endowment balances trended upwards through most of the 1990s and 2000s. Endowment balances declined sharply during the financial crisis that began in 2008, but subsequently recovered. Strong investment returns have contributed to this growth in endowment balances. For 2014, endowments earned an average return of 15.5%. Over time, an increasing proportion of endowment funds have been invested in "alternative strategies," including private equity and hedge funds. Large endowments are more likely than smaller endowments to have their funds invested in alternative strategies.

Spending, or payouts, from endowments supports various higher education activities. The spending rate, or payout rate, has fluctuated over time. For 2014, the payout rate for NACUBO institutions was 4.4%. On average, in recent years, institutions with the largest endowments have tended to have payout rates that exceeded average payout rates for institutions with smaller endowments.

This report begins by providing background information on college and university endowments, and discussing their current-law tax treatment. The report then reviews available data and trends related to endowment balances, payout rates, and investment returns. The report concludes with a discussion of several policy options to change the current tax treatment of college and university endowments.

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[1] See, for example, Josh Lerner, Antoinette Schoar, and Jialan Wang, "Secrets of the Academy: The Drivers of University Endowment Success," *Journal of Economic Perspectives*, vol. 22, no. 3 (Summer 2008), pp. 207-222 and Jeffrey R. Brown, Stephen G. Dimmock, and Jin-Koo Kang, et al., "How University Endowments Respond to Financial Market Shocks: Evidence and Implications," *American Economic Review*, vol. 104, no. 3 (2014), pp. 931-962. The Higher Education Opportunity Act (P.L. 110-315) required the Comptroller General to conduct a study on college and university endowments. This study was published as U.S. Government Accountability Office, *Postsecondary Education: College and University Endowments Have Shown Long-Term Growth, While Size, Restrictions, and Distributions Vary*, GAO-10-393, February 2010, available at: http://www.gao.gov/products/GAO-10-393.

[2] Senator Grassley's opening statement and a video of the roundtable are available at http://www.finance.senate.gov/newsroom/ranking/release/?id=38a762b5-0fc7-4a9c-a130-3ddf23812279.

[3] More information on the hearing and links to hearing testimony can be found at http://waysandmeans.house.gov/event/39840295/.

[4] National Association of College and University Business Officers and Commonfund Institute, *NACUBO-Commonfund Study of Endowments, 2014*, 2015. Selected content available at http://www.nacubo.org/Research/NACUBO-Commonfund_Study_of_Endowments.html. Cited hereafter as "NACUBO-Commonfund Study of Endowments, 2014."

What Is an Endowment?

A college or university's endowment fund—often referred to simply as an endowment—is an investment fund maintained for the benefit of the educational institution. Endowments may also hold cash or property. Income from the endowment is used to cover the cost of the college or university's operations and capital expenditures, to fund special projects, or for reinvestment. Typically, a college or university endowment includes hundreds, if not thousands, of individual funds that are the result of various agreements between donors and the recipient institution.

There are several types of endowment funds. Donors may give funds to a *true endowment*, or permanent endowment. Oftentimes, donors impose restrictions on the institutions spending the principal balance of true endowments. Donors may also impose restrictions on the use of income earned on true endowments. True endowments may contain funds that the donors have dedicated to scholarships or faculty support, for example.

A *term endowment* is an endowment where funds may be restricted by the donor for some period of time. After the set period of time has passed, unused funds or principal may become unrestricted.

Institutions may also put other unrestricted funds, such as those from general gifts or bequests, in the institution's endowment. These funds are typically referred to as a *quasi-endowment*. Typically, when looking at the total value of an institution's endowments, true endowments, term endowments, and quasi-endowments are included.

Of the $516.0 billion in endowment assets reported to NACUBO in 2014, $226.6 billion (44%) was in a true endowment, while $119.0 billion (23%) was in a quasi-endowment.[5] Of the true endowment balance, $210.3 billion was donor restricted (41% of total endowment market value). The reported term endowment balance was $17.9 billion (3%).[6]

Tax Treatment of College and University Endowments

Endowments are tax-exempt for one of two reasons. Either they are part of a university which is tax-exempt as a 501(c)(3) organization or a government entity (public universities), or the endowment itself has 501(c)(3) tax-exempt status.[7] Contributions to 501(c)(3)s and government entities are generally tax deductible to the contributor under Internal Revenue Code (IRC) Section 170. Another benefit of an endowment's tax-exempt status is that the investment earnings are tax free.[8]

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[5] NACUBO-Commonfund Study of Endowments, 2014, p. 99.

[6] There are two other categories for components of endowments in the NACUBO survey: (1) funds held in trust by others, at $22.6 billion in 2014; and (2) an unspecified other category for endowment funds, at $129.9 billion.

[7] Bruce R. Hopkins, "Chapter 11: Other Charitable Organizations," in *The Law of Tax Exempt Organizations*, 10th ed. (John Wiley & Sons, Inc., 2011).

[8] As the Joint Committee on Taxation has explained, "In general, an exempt organization may have revenue from four sources: (1) contributions, gifts, and grants; (2) trade or business income that is related to exempt activities (e.g., program service revenue); (3) investment income; (4) and trade or business income that is not related to exempt activities. In general, the Federal income tax exemption extends to the first three categories, and does not extend to an organization's unrelated trade or business income." Unrelated business income is "income derived from a trade or business regularly carried on by the organization that is not substantially related to the performance of the (continued...)

The 501(c)(3) status of colleges and universities—and by extension their endowments—is a result of them being organized and operated exclusively for purposes listed in Section 501(c)(3), specifically charitable and educational purposes.

If the return from endowments of colleges and universities were taxed currently at 35%, the revenue gain is estimated at $16.2 billion for FY2014.[9] If only private universities and colleges were subject to a tax, the gain would be estimated at $11.1 billion, since public institutions are responsible for 31.7% of assets.[10] This figure can be compared with the estimated value of other tax provisions that directly benefit educational institutions. These include the deduction for charitable contributions to educational institutions, estimated at $6.3 billion (while the deduction is claimed by individuals and corporations, the benefit also accrues to institutions of higher education); private activity tax-exempt bonds for nonprofit educational institutions, estimated at $2.3 billion; and the share of general obligation tax exempt bonds benefits that accrue to public institutions of higher education, which are estimated at around $2.7 billion. These benefits total approximately $11 billion.[11]

Comparing the Tax Treatment of Endowments and Private Foundations

Comparisons are often drawn between private foundations and college endowments, particularly when considering certain policy options (payout requirements, for example). Unlike private foundations, college endowments are not subject to a payout requirement. Private foundations are differentiated from tax-exempt public charities by their narrow bases of control and financial support.[12] In order to limit accumulation of tax-exempt funds by foundations, Congress chose to

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organization's tax-exempt functions." Hence, in so far as the income—including investment income—of an endowment is related to the college or university's tax-exempt functions, that income would not be subject to tax. However, passive income from items such as rents from real property, interest and dividends are subject to the tax if they are debt financed or received from a controlled organization. Income under the unrelated business income tax (UBIT) is taxed at the corporate rate (top rate of 35%). See Joint Committee on Taxation, *Historical Development and Present Law of the Federal Tax Exemption for Charities and Other Tax-Exempt Organizations*, April 20, 2005, JCX-29-05, p. 5 and Table 4 on p. 31.

[9] This estimate was made by CRS using the following information. The fiscal year runs from July 2013 through June 2014. Total endowments at NACUBO institutions at the end of the fiscal year were $516 billion, after having earned an average of 16.3% weighted by the share of assets in each side class and their respective returns, according to 2014 NACUBO-Commonfund Study of Endowments, National Association of College and University Business Officers and Commonfund Institute, 2015. (The aggregate return reported is 15.5%, but that return is measured given an equal weight for each institution. The 16.3% return has an equal weight for each institution within a size category but weights by asset size for the composite of size categories). If all of this income were taxed currently the collections would be $25.3 billion. Some portion of these earnings would be unrealized capital gains. The share of unrealized capital gains was estimated at 36% calculated by assuming current taxation of income of fixed income assets (which accounted for 3% of earnings, assuming a 4% dividend on other assets (which was 24.5% of the total) , and assuming half of the reminder (capital gains) is realized. There is little evidence on the ratio of realizations to accruals for nonprofits and the assumption of one half is based on historical data indicating that individual realizations are half of accruals. See CRS Report 91-250, *Limits to Capital Gains Feedback Effects*, by (name redacted). This estimate is revenue that would be collected if endowment returns were taxed currently at 35%, and does not consider potential behavioral responses.

[10] NACUBO-Commonfund Study of Endowments, 2014.

[11] See Joint Committee on Taxation, *Estimates Of Federal Tax Expenditures For Fiscal Years 2014-2018*, JCX-97-14, November 7, 2014, https://www.jct.gov/publications.html?func=startdown&id=4663.

[12] Private foundations may either be categorized as operating or non-operating. Operating private foundations generally conduct their own charitable activities (e.g., operate a museum), while non-operating private foundations generally provide charitable support through grants or other forms of financial assistance. The majority of private foundations are (continued...)

require private foundations (and only private foundations) to pay out at least 5% of their fund every year under Internal Revenue Code (IRC) Section 4942.[13]

Private foundations are also subject to an excise tax on net investment income.[14] The tax rate is 2%, but is reduced to 1% if the foundation's qualifying distributions exceed a historical average.

College and University Endowments: Data Overview

Endowment Balances

There are several sources of data on endowment balances. Specifically, data on endowments can be obtained from the following sources:

- ***U.S. Department of Education***: The U.S. Department of Education publishes data on endowment funds. Generally, information is provided on total endowment funds for all public and private colleges and universities and separately for the top 120 institutions. At the end of FY2012 (June 30, 2012), 4,706 institutions reported endowment funds of $424.6 billion.[15] The 120 institutions with the largest endowments held $316.0 billion, or 74.4% of the total.
- ***National Association of College and University Business Officers (NACUBO)***: NACUBO regularly gathers endowment data from a large number of public and private colleges and universities and affiliated foundations.[16] At the end of FY2014 (June 30, 2014), 832 institutions reported $516.0 billion in endowment assets.[17] The NACUBO survey provides the most up-to-date information on endowments, although it may not include the same institutions included in the U.S. Department of Education data.
- ***Internal Revenue Service***: Data on endowments of 501(c)(3) (private) universities and colleges are reported on Schedule D of IRS Form 990 informational returns. IRS data representing 1,392 501(c)(3) universities and colleges reported $322.3 billion in endowment assets for 2012.[18]

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non-operating.

[13] Section 4942 does not apply to private operating foundations.

[14] IRC Section 4940(a). This tax does not apply to certain qualifying operating foundations. IRC section 4940(d)(2).

[15] Data on 2011-2012 endowments can be found in the U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 2013*, May 7, 2015, at http://nces.ed.gov/pubs2015/2015011.pdf. Institutions included are those that grant associate's or higher degrees and participate in Title IV federal financial aid programs.

[16] Some institutions manage their endowments through institutionally related foundations. These related foundations are generally treated as 501(c)(3) public charities, and not subject to tax rules that apply to other types of private foundations.

[17] For FY2012, 831 institutions reported $406.1 billion in endowment assets for the NACUBO survey.

[18] The 2012 Form 990s are filed for the 2012 calendar year or for fiscal years that began in 2012 and ended in 2013. Some organizations use calendar year accounting periods, while others use fiscal year accounting periods. Additional information on endowment data from the IRS is provided in **Appendix A**.

Historically, the aggregate endowment values reported in the NACUBO survey have closely tracked the endowments data published by the Department of Education. While the Department of Education data includes all Title IV institutions, the NACUBO survey gathers information on endowments from affiliated foundations.[19] In 2012, U.S. endowment assets reported by NACUBO were 95.6% of the value reported by the Department of Education ($406.1 billion as opposed to $424.6 billion). In 2011, U.S. endowment assets reported by NACUBO were 98.2% of the value reported by the Department of Education ($408.1 billion as opposed to $415.7 billion).

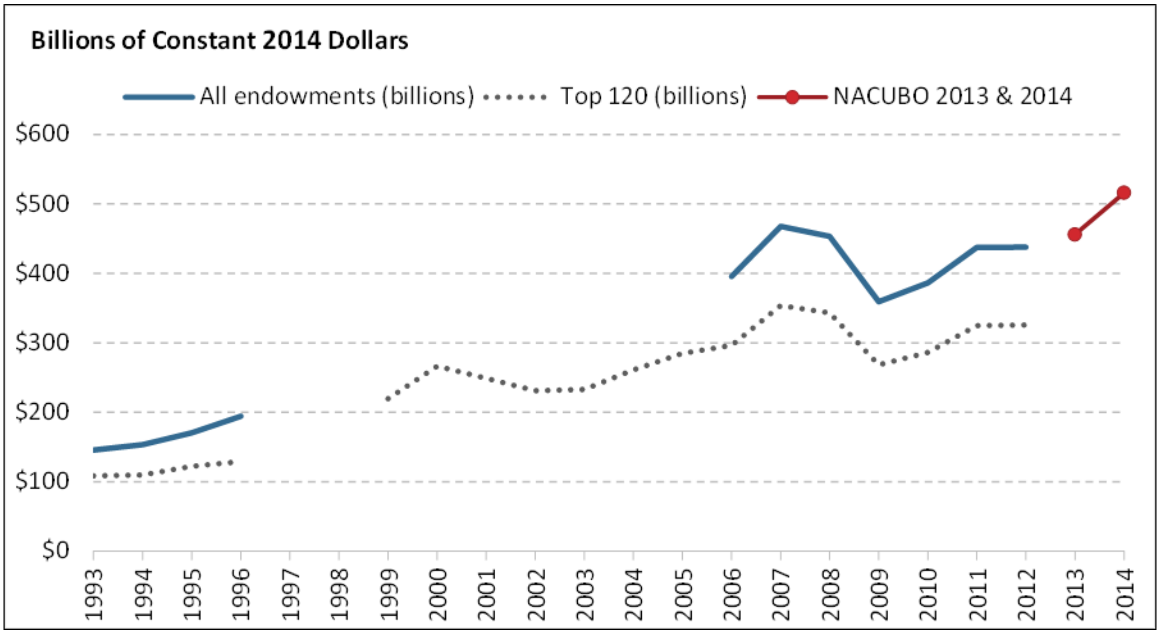
There have been fluctuations in endowment balances over time. Overall, endowment balances have increased substantially since the early 1990s, both in nominal and real (inflation-adjusted) terms (**Figure 1** shows trends in endowment balances since 1993, in inflation-adjusted terms). In 1993, endowment balances were $144.6 billion (inflation-adjusted to 2014 dollars). By 2012, endowment balances were $424.6 billion (inflation-adjusted). While the Department of Education has not yet released data for 2014, data from the NACUBO survey, which closely tracks Department of Education statistics on endowments, reported endowment assets of $516.0 billion for 2014. The share of endowments held by the top 120 institutions (the Department of Education regularly reports data on endowments held by the top 120 institutions) has remained roughly the same over time, at around 74%.

Endowment values decreased substantially during the 2007-2008 financial crisis, and took several years to recover to pre-crisis levels. In 2007, endowments were valued at $467.7 billion (in inflation-adjusted 2014 dollars). Balances had declined to $359.3 billion (inflation-adjusted) by 2009. By 2013, inflation-adjusted endowment balances had reached $455.9 billion, before increasing further to $516.0 billion in 2014.

[19] A Title IV institution is one that has an agreement with the Secretary of Education allowing the institution to participate in Title IV federal student financial assistance programs, including the Federal Pell Grant program. For more information, see CRS Report R43351, *The Higher Education Act (HEA): A Primer*, by (name redacted) .

Figure 1. Endowment Balances

1993-2014, Constant 2014 Dollars



Source: CRS analysis of Department of Education and NACUBO data.

Notes: Data are inflation adjusted using the Consumer Price Index (CPI-U). Data from 1993 through 2012 are from the National Center for Education Statistics, Digest of Education Statistics, various years. Endowment data for all institutions are not available for 1997 through 2005. From 1993 through 1996 and again from 1999 through 2012, the National Center for Education Statistics reported endowment values for the top 120 institutions. Between 1999 and 2005, the Digest of Education Statistics reported data on the endowments of the top 120 institutions, with their source for the data being NACUBO. The data points for 2013 and 2014 are total endowment values from the NACUBO survey.

College and University Endowments: FY2014

For the fiscal year ending June 30, 2014, data gathered by NACUBO from 832 universities and colleges reported total endowment assets of $516.0 billion. As illustrated in **Table 1,** endowment balances are heavily concentrated in a small share of institutions, with 11% of institutions holding 74% of endowments. Private nonprofit universities (classified as "independent" in **Table 1**) have a slightly higher share of endowments (68%) relative to their share of institutions (64%), and have over two-thirds of all endowments.

Table 1. Endowments and Institutions by Endowment Size

FY2014

Endowment Size in 2014	Share of Institutions (%)	Share of Endowment (%)
>$1 billion	10.9	74.0
$0.5 billion - $1.0 billion	9.3	10.7
$0.1 billion - $0.5 billion	31.5	11.7
$0.05 billion - $0.1 billion	20.2	2.5
$0.025 billion - $0.05 billion	15.0	0.9
<$0.025 billion	13.1	0.3

Endowment Size in 2014	Share of Institutions (%)	Share of Endowment (%)
Public	36.3	31.7
Independent	63.9	68.3
Full Sample (Equal Weighted)	**100.0**	**100.0**

Source: Based on data from NACUBO-Commonfund Study of Endowments, 2014.

Notes: Data collected from 832 institutions holding $516 billion of endowment assets.

Largest Private College and University Endowments

Table 2 provides information on the endowments of the 25 private universities and colleges with the largest endowment per undergraduate student.[20] In FY2014, Yale's endowment was nearly $2.0 million per student. Princeton's endowment was worth more than $2.6 million per student, while Harvard's endowment was nearly $1.3 million per student. Endowment wealth is highly concentrated in these top institutions, with Harvard holding 7.0% of all endowment assets reported to NACUBO in FY2014. Yale held 4.6% of endowment assets in that same year, with Princeton holding 4.1%. **Table 2** includes information on institutions that only have undergraduate programs (i.e., liberal arts colleges as opposed to universities), as well as institutions where the graduate student population outweighs the undergraduate student population (e.g., Yale University). Information on endowment per student is reported as both endowment per undergraduate and endowment per student including graduate and undergraduate students. The ranking of institutions by "endowment per student" depends on which measure of "student" is used.[21]

Table 2. Endowments of the 25 Private Universities and Colleges with the Largest Endowments per Undergraduate Student

FY2014

Institution	Endowment ($ billions)	Share of Total Endowments (%)	Endowment per Undergraduate ($ thousands)	Endowment per Student Including Graduate Students ($ thousands)
Yale University	23.9	4.6	4,401	1,974
Princeton University	21.0	4.1	3,945	2,620
Harvard University	35.9	7.0	3,408	1,269
Stanford University	21.4	4.2	2,932	1,170
Massachusetts Institute of Technology	12.4	2.4	2,739	1,097
Rice University	5.5	1.1	1,394	834

[20] **Appendix B** contains a list of the top 100 college and university endowments as reported to NACUBO for FY2014.

[21] Additionally, endowment per student measures depend on how enrollment is measured. Fall enrollment is used for the purposes of calculating enrollment per student in **Table 2**.

Institution	Endowment ($ billions)	Share of Total Endowments (%)	Endowment per Undergraduate ($ thousands)	Endowment per Student Including Graduate Students ($ thousands)
The University of Chicago	7.5	1.5	1,315	498
Pomona College	2.1	0.4	1,304	
Swarthmore College	1.9	0.4	1,239	
Amherst College	2.1	0.4	1,176	
Williams College	2.3	0.4	1,097	
Duke University	7.0	1.4	1,058	455
Grinnell College	1.8	0.4	1,046	
Dartmouth College	4.5	0.9	1,045	705
University of Notre Dame	8.0	1.5	943	660
University of Pennsylvania	9.6	1.9	833	390
The Cooper Union for the Advancement of Science and Art	0.7	0.1	832	785
Washington University in St. Louis	6.6	1.3	810	705
Washington and Lee University	1.5	0.3	796	649
Principia College	0.7	0.1	770	
Wellesley College	1.8	0.4	728	
University of Richmond	2.3	0.4	719	559
Berea College	1.1	0.2	678	
Bowdoin College	1.2	0.2	669	
Vanderbilt University	4.1	0.8	597	320

Source: Based on data from NACUBO-Commonfund Study of Endowments, 2014 and data on enrollment from U.S. Department of Education, National Center for Educational Statistics, College Opportunities Online Locator, http://nces.ed.gov/collegenavigator/.

Notes: Principia has both K-12 and college programs. Per student figures are based on fall enrollment. The last column is left blank for schools with no graduate program.

Endowment assets are concentrated in private doctoral-granting universities. In FY2013, the average endowment per student at private doctoral-granting universities was $214,300 (the median was $70,900) (see **Table 3**). The average endowment per student at public doctoral-granting universities was $28,000 (with a median of $16,600). For the 10% of students enrolled at private doctoral-granting universities with the largest endowments, the average endowment per student was $1.4 million.[22]

[22] This 10% is 10% of all students enrolled in private doctoral-granting universities (as opposed to 10% of all students enrolled in 4-year colleges or universities).

Table 3. Endowment Assets per Student

2013

	Doctoral	Master's	Bachelor's
Private, Nonprofit, 4-Year Institutions			
Mean	$214,300	$19,300	$94,200
Median	$70,900	$12,700	$36,200
Public, 4-Year Institutions			
Mean	$28,000	$4,200	$5,200
Median	$16,600	$3,300	$1,600

Source: The College Board, *Trends in College Pricing 2015*, 2015, http://trends.collegeboard.org/college-pricing.

Notes: Students are measured as full-time equivalent (FTE).

Payouts from College and University Endowments

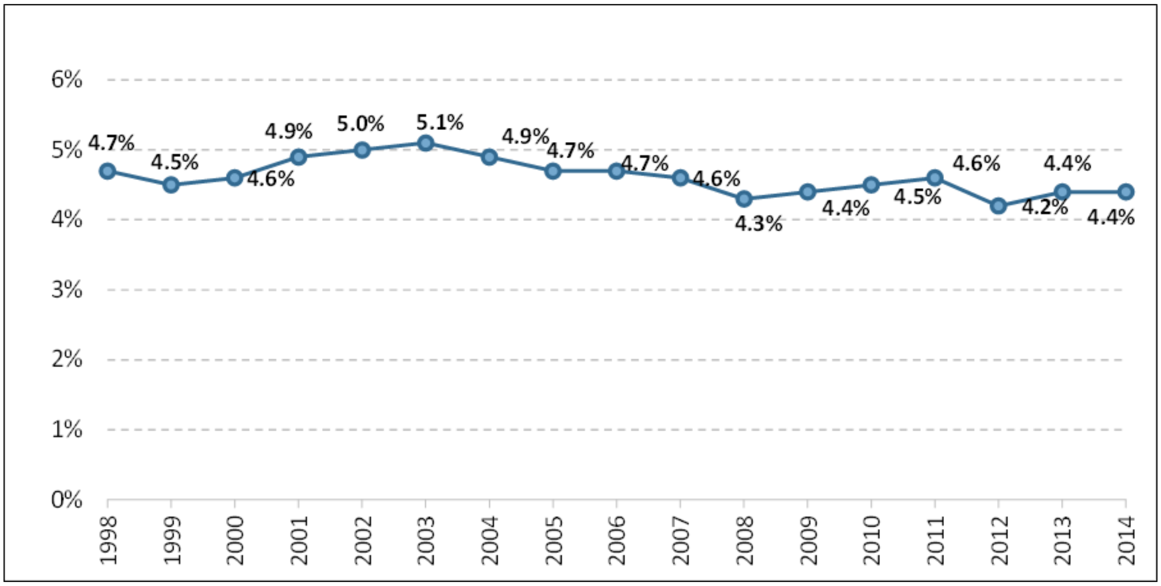
Spending from the endowment includes expenditures on student financial aid, faculty research, maintenance of facilities, and other campus operations. The spending rate, or payout rate, is this spending divided by the market value of the endowment at the beginning of the year (net of administrative expenses). Most institutions have a spending policy, where the payout rate is tied to a moving average of endowment value.[23] Colleges and universities may deviate from pre-determined spending policies, particularly in the face of negative financial shocks like the 2008-2009 financial crisis.[24]

NACUBO publishes data on average annual effective spending rates from endowment funds, or payouts. Since 1998, the average annual effective spending rate, or average payout rate, has fluctuated within a one-percentage-point band, hitting a period high of 5.1% in 2003 and period low of 4.2% in 2012 (see **Figure 2**). In 2014, the average payout rate was 4.4%.

[23] NACUBO-Commonfund Study of Endowments, 2014, p. 45. In FY2014, the average pre-specified spending rate for institutions participating in the NACUBO survey was 4.5%, and 92% of institutions followed their spending policy.

[24] Jeffrey R. Brown, Stephen G. Dimmock, and Jin-Koo Kang, et al., "How University Endowments Respond to Financial Market Shocks: Evidence and Implications," *American Economic Review*, vol. 104, no. 3 (2014), pp. 931-962. Specifically, Brown et al. (2014) find that universities tend to reduce payouts relative to stated payout policies following negative shocks. However, following positive shocks, there is no evidence of changes to payouts. The authors suggest this as evidence of "endowment hoarding."

Figure 2. Average Annual Effective Spending (Payout) Rate
1998-2014



Source: NACUBO, data available at http://www.nacubo.org/Research/NACUBO-Commonfund_Study_of_Endowments/Public_NCSE_Tables.html.

Notes: Average annual effective spending rates are calculated as endowment spending on student financial aid, faculty research, maintenance of facilities, and other campus operations, divided by endowment value at the beginning of the fiscal year.

Spending (payout) rates also varied across different types of institutions in FY2014. Data presented in **Table 4** show that the average payout rate was higher for independent institutions (4.5%) when compared to public institutions (4.1%). Excluding institutions with small endowments (less than $25 million), the NACUBO data indicate that average payout rates in 2014 increased with endowment size. The average payout rate was 4.6% for endowments with assets above $1 billion, with slightly lower payout rates for most smaller endowment size classes. In 2014, about 26% of the largest endowments included in the NACUBO survey had a payout of 5% or more.[25]

Data on endowments of 501(c)(3) colleges and universities collected by the IRS can also be used to examine payout behavior. IRS data from 2012 indicate the average payout for 501(c)(3) institutions was 4.9% (see **Table A-2**). For institutions with large endowments (more than $1 billion in 2012), roughly half had payout rates between 4.5% and 5.5% in 2012. There is a wider distribution of payout rates across institutions with smaller endowments. For example, looking at institutions with endowments between $0.05 billion and $0.1 billion, half had payout rates between 3.2% and 5.6% in 2012.

[25] Testimony of Mary Frances McCourt, Senior Vice President and Chief Financial Officer, Indiana University on behalf of the National Association of College and University Business Officers, in U.S. House of Representatives, House Committee on Ways and Means Subcommittee on Oversight, *Examining the Rising Costs of Higher Education*, hearings, 114th Cong., 1st sess., October 7, 2015. Testimony available at http://waysandmeans.house.gov/event/39840295/.

Table 4. Endowment Characteristics by Size of Endowment

FY2014

Endowment Size in 2014	Spending (Payout) Rate (% of Endowment)
>$1 billion	4.6
$0.5 billion - $1.0 billion	4.3
$0.1 billion - $0.5 billion	4.3
$0.05 billion - $0.1 billion	4.4
$0.025 billion - $0.05 billion	4.2
<$0.025 billion	4.6
Public	4.1
Independent	4.5
Full Sample (Equal Weighted)	**4.4**

Source: Based on data from National Association of College and University Business Officers (NACUBO), http://www.nacubo.org/Research/NACUBO-Commonfund_Study_of_Endowments/Public_NCSE_Tables.html.

Notes: Data collected from 832 institutions holding $516 billion of endowment assets.

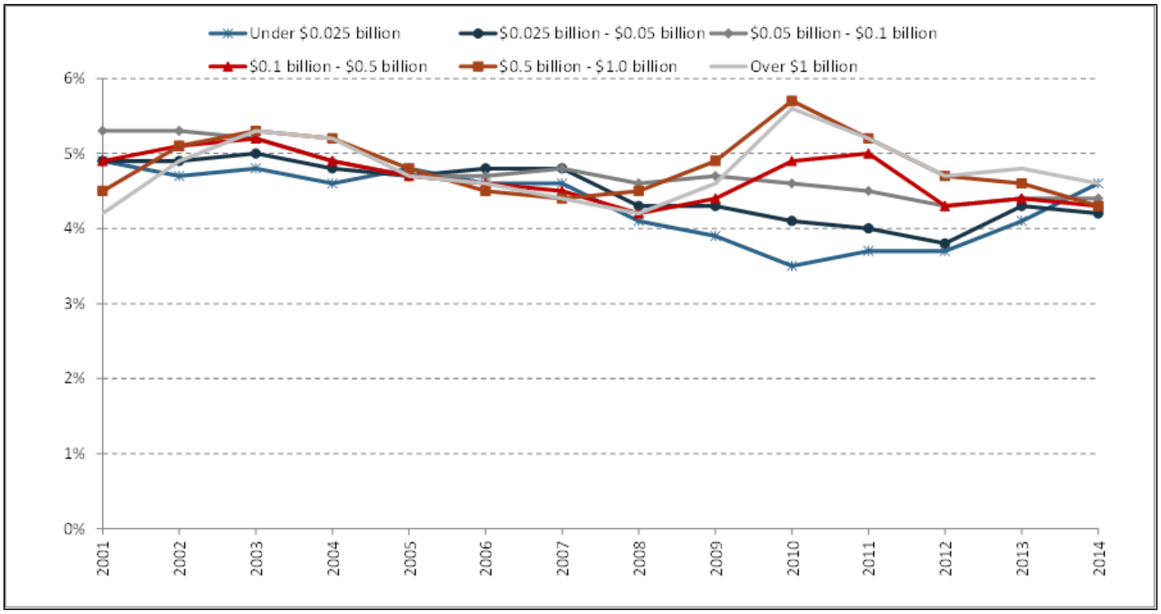
Trends in payout rates over time have differed for institutions with large endowments as opposed to smaller endowments (see **Figure 3**). Payout rates generally trended downward between 2003 and 2008 (the average payout rate was 5.1% in 2003, as opposed to 4.3% in 2008). While average payouts trended upwards from 2008 through 2011, during that time, a gap developed between the average payout rate of institutions with endowments of $0.5 billion or more, and those with smaller endowments of less than $0.05 billion. In 2010, the average payout rate for institutions with endowments between $0.5 billion and $1 billion, and those with average endowments above $1 billion, was 5.7% and 5.6%, respectively. The average payout rate for institutions with an endowment between $0.025 billion and $0.05 billion was 4.1% in 2010, while the average payout rate for institutions with endowments of less than $0.025 billion was 3.5%.

These trends suggest that during and in the period immediately following the Great Recession, institutions with larger endowments tended to increase payouts. Institutions with large endowments, where spending from endowments funds a significant portion of operating expenses, tend to base payouts on average endowment values in recent years (often over a three-year period).[26] Thus, payouts tend to increase when endowments decline. Where payout rates tended to decline during and immediately following the Great Recession was among institutions with smaller endowments. As the economy has recovered, payout rates for institutions with large and smaller endowments have again converged and are close to the average across all institutions (4.4%).

[26] Institutions with larger endowments use endowment funds in their annual operating budget, on average. In FY2014, for institutions with endowments of $1 billion or more, 16.9% of operating budgets were funded by endowments (the median value was 9.5%). For institutions with endowments of $51 million - $100 million, 6.7% of operating budgets were funded by endowments, on average (the median value was 2.6%). See NACUBO-Commonfund Study of Endowments, 2014, p. 50.

Figure 3. Average Annual Effective Spending (Payout) Rate by Endowment Size

2001-2014



Source: College Board and NACUBO. Data underlying the figure are available at http://trends.collegeboard.org/college-pricing/figures-tables/content/endowment-spending-rates-over-time.

Notes: Average annual effective spending rates are calculated as endowment spending on student financial aid, faculty research, maintenance of facilities, and other campus operations, divided by endowment value at the beginning of the fiscal year.

Endowment Fund Investments

In recent years, on the whole, invested endowment assets have yielded strong returns. In FY2014, endowment assets included in the NACUBO survey earned a return of 15.5%, resulting in income of $79 billion (see **Table 5**).[27]

Returns on Endowment Fund Investments

Endowment returns vary across different types of institutions and over time. In 2014, institutions with larger endowments tended to earn higher returns.[28] This pattern tends to hold when looking at returns over longer periods of time (3-, 5-, or 10-year average rates of return). Returns of public and private nonprofit (independent) institutions are similar (when looking at equal-weighted figures).

[27] The 15.5% figure is an equal weighted-rate of return. Since institutions with larger endowments tend to earn higher returns and have a proportionally larger share of assets than their share of institutions, weighting the return in each size category by the share of assets in that category yields a higher estimated rate of return, 16.3%. This measure is closer to a dollar-weighted return.

[28] Other research has shown that in the 1990s and early 2000s, Ivy League schools tended to have endowment returns that outperformed other universities. Institutions with large endowments and high student SAT scores were also found to have endowments with above average returns in that time period. See Josh Lerner, Antoinette Schoar, and Jialan Wang, "Secrets of the Academy: The Drivers of University Endowment Success," *Journal of Economic Perspectives*, vol. 22, no. 3 (Summer 2008), pp. 207-222.

Table 5 also provides information on the share of assets invested in alternative strategies (which includes hedge funds and private equity).[29] Institutions with larger endowments tend to have a higher share of their endowment assets invested in alternative strategies. Institutions with smaller endowments tend to have most of their endowment assets invested in domestic equities, fixed income, or international equities. Trends in where endowment funds are invested over time are examined further below.

Table 5. Rate of Return by Endowment Size and Time Period

	Rate of Return (%)				
Endowment Size in 2014	**1-Year**	**3-Year**	**5-Year**	**10-Year**	**Assets in Alternative Strategies (%)[a]**
>$1 billion	16.5	9.5	12.1	8.2	57
$0.5 billion - $1.0 billion	15.8	9.1	11.8	7.3	44
$0.1 billion - $0.5 billion	15.5	8.9	11.8	7.1	33
$0.05 billion - $0.1 billion	15.2	8.7	11.4	6.5	24
$0.025 billion - $0.05 billion	15.3	8.9	11.4	6.5	18
<$0.025 billion	15.5	9.4	12.0	6.6	10
Public	15.7	9.0	9.0	7.0	46
Independent	15.4	9.0	9.0	7.1	54
Full Sample (Equal Weighted)	**15.5**	**9.0**	**11.8**	**7.1**	**28[b]**

Source: NACUBO-Commonfund Study of Endowments, 2014.

Notes: Averages are equal weighted, unless otherwise specified.

a. NACUBO does not report decimal places in their asset allocation tables. Data on asset allocations, or the percentage of assets invested in alternative strategies, are dollar weighted.

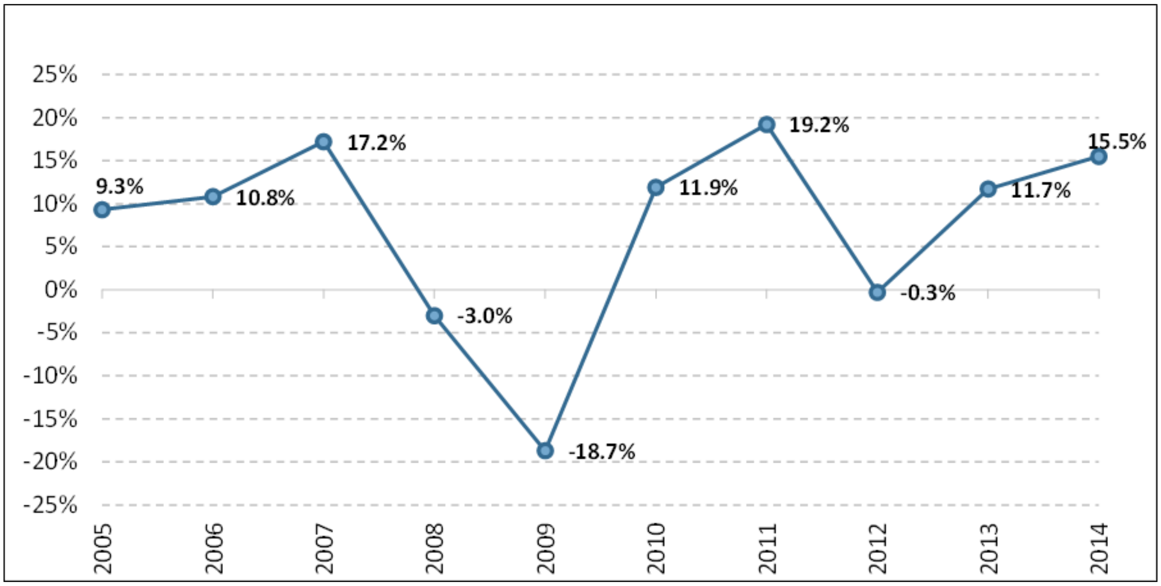
b. The 28% full-sample estimate of assets invested in alternative strategies is the equal-weighted estimate. This increases to 51% when a dollar-weighted average is used.

The 10-year estimate includes the period of the most serious recession in post-World War II history. Using returns from a longer period would imply a smaller tax benefit from exempting returns from tax than is estimated for 2014, depending on the period used. **Figure 4** shows the returns earned since 2005 and illustrates the effects of the recession and financial downturn.

[29] Of the 51% of dollar-weighted assets invested in alternative strategies, 11% are invested in private equity, 18% in "marketable alternative strategies," which includes hedge funds and derivatives, and 6% are in private equity real estate.

Figure 4. Average Net Returns

2005-2014



Source: NACUBO-Commonfund Study of Endowments, 2014.

Where Are Endowment Funds Invested?

There has been a shift in where endowment assets are invested in recent years. Between 2002 and 2014, the share of endowment assets invested in equities declined from 50% to 36% (there was a period low of 31% in both 2010 and 2012) (see **Table 5**). The percentage of assets invested in fixed income declined from 23% to 9% over the same time period. While the proportion of assets being invested in equity and fixed income declined, the share of assets invested in alternative strategies increased. The share of assets invested in alternative strategies, which includes hedge funds and private equity, increased from 20% in 2002 to 51% in 2014.[30]

Investment Strategy Definitions

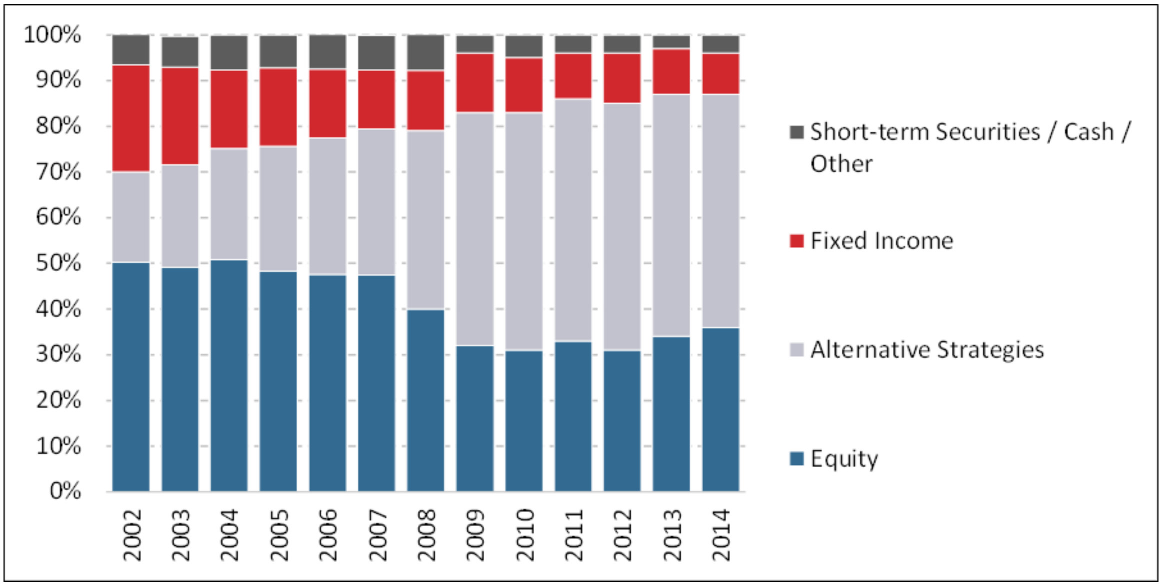
Equity Investments: The investor has an ownership interest in a company, often through the purchase of stock in the company, which can be traded on a public market. Income is generally derived from dividends (payments to shareholders out of the company's profits), or the realization of capital gains upon the sale of the stock.

Fixed Income Investments: The investor lends money to a corporation (or government) borrower who pays a fixed amount of interest on a regular basis until a predetermined date. At that date the borrower also pays back the principal to the investor. Fixed income investments include U.S Treasuries, money market instruments, mortgage and asset backed securities, and bonds.

Alternative Investment Strategies: These investment strategies include any investment not considered traditional. Often traditional investments include stocks (i.e., equities) and bonds (i.e., fixed income). Alternative strategies include private equity, venture capital, hedge funds, distressed (or private) debt, and "real assets" (like real estate, or oil and natural gas).

[30] Empirical research has explored why the asset allocation of university endowments has shifted towards alternative investments. Competition is one reason. There is evidence that institutions tend to increase the share of endowment holdings invested in hedge funds to "catch up" with schools that are competitors. See William N. Goetzmann and Sharon Oster, "Competition among University Endowments," in *How the Financial Crisis and Great Recession Affected Higher Education*, ed. Jeffrey R. Brown and Caroline M. Hoxby (Chicago, IL: The University of Chicago (continued...)

Figure 5. Asset Allocations for U.S. College and University Endowments
FY2002-FY2014



Source: CRS analysis of NACUBO data.

Notes: "Alternative strategies" includes private equity, hedge funds, venture capital, energy and natural resources, and distressed debt. Real estate is included in the other category. All data are dollar weighted.

The increasing share of endowment assets invested or held in alternative strategies has raised concerns among some policymakers regarding the use of offshore "blocker" corporations to avoid the unrelated business income tax (UBIT) on hedge fund investments.[31] This issue was the topic of a 2007 Senate Committee on Finance hearing.[32] The shaded text box below provides additional background and information on UBIT and the use of blocker corporations to avoid UBIT.

Investing Endowments in Hedge Funds: The Unrelated Business Income Tax (UBIT) and "Blocker" Corporations

The Unrelated Business Income Tax (UBIT)

The unrelated business income tax (UBIT) is effectively the corporate income tax applied to a tax-exempt organization's unrelated business income. Unrelated business income is any income from a trade or business that is regularly conducted by the organization and is not substantially related to the organization's exempt purpose.[33] For example, if a university operates a gym facility that is used by students for physical education classes and is also open to members of the public who pay a fee, the fees collected from the public may be subject to UBIT.[34]

(...continued)

Press, 2015), pp. 99-126.

[31] For further explanation of this technique, see Summer A. LePree, "Taxation of United States Tax-Exempt Entities' Offshore Hedge Fund Investments: Application of the Section 514 Debt-Financed Rules to Leveraged Hedge Funds and Derivatives and the Case for Equalization," *The Tax Lawyer*, Vol. 61 (Spring 2008): 807-853.

[32] See Senate Finance Committee Hearings Offshore Tax Issues: Reinsurance and Hedge Funds, United States Senate Committee on Finance, September 26, 2007, http://www.finance.senate.gov/hearings/hearing/?id=ddb36aa0-beb0-e2f8-275e-13625c509939.

[33] See IRC §513.

[34] See, e.g., IRS Rev. Rul. 78-98; 1978-1 C.B. 167.

While investment income (e.g., dividends and interest) is generally exempt from UBIT, such income is subject to UBIT if it is derived from debt-financed property.[35] Furthermore, if a tax-exempt organization invests in a pass-through entity, such as a partnership, that invests using borrowed funds, then income from that debt-financed investment will flow through to the exempt organization and be subject to UBIT.[36] A different result occurs if the tax-exempt organization invests in a corporation, rather than a pass-through entity. When a corporation pays out a dividend to tax-exempt shareholders, the dividend is not subject to UBIT even if the corporation had debt-financed investments.[37]

Hedge Funds and UBIT

Hedge funds are typically structured as partnerships and use borrowed funds for investing. Therefore, investments by tax-exempt organizations in hedge funds often give rise to UBIT as income derived from debt-financed property.

Blocker Corporations to Avoid UBIT

A method by which tax-exempt organizations can legally avoid paying UBIT on hedge fund investments is through the use of a blocker corporation. While there are various ways in which the blocker corporation can be set up, the basic structure is that the blocker corporation is established between the hedge fund and the tax-exempt organization so that any investment income the tax-exempt organization receives is in the form of a dividend from the blocker corporation, rather than income flowing directly from the hedge fund. Since it is a corporate dividend, there are no UBIT consequences—in other words, the use of the corporation essentially "blocks" any income subject to UBIT from flowing through the hedge fund to the tax-exempt investor.

In order to avoid tax consequences for the blocker corporation, these entities are generally established in low or zero tax countries, like the Cayman Islands. The blocker corporation will then owe little or no tax to its home country, and it will typically have minimal or no U.S. tax liability since it is a foreign corporation operating outside the United States.[38]

Policy Considerations and Options

There are a number of policy options related to the tax treatment of endowments, should there be a desire to change the status quo. Policy options considered may depend on the overarching policy objective. For example, is the goal of the policy to encourage colleges and universities to use endowment funds for a specific purpose? Or is the objective of the policy to carve back or restrict the tax exemption currently provided to endowments? Identifying the goals of endowment-related tax policies may help inform the analysis of specific policy options. Leaving current-law tax treatment of endowments unchanged is also an option.

Impose a Payout Requirement

Some policymakers have proposed requiring endowments to pay out a minimum amount every year to prevent "an unreasonable accumulation of taxpayer-subsidized funds."[39] One option would be to require that endowments have a minimum 5% payout rate, similar to that required of private foundations. In the face of rising tuition, it has been suggested that to achieve their charitable and educational objectives, colleges and universities should use a greater portion of

[35] See IRC §514.

[36] See IRC §512(c).

[37] Unlike pass-through entities, which are not subject to tax and whose income flows through to their investors, corporations are subject to tax on their income. See IRC §11.

[38] See IRC §881.

[39] Senator Charles Grassley, "Grassley Urges Continued Look at College Endowment Growth, Student Affordability," press release, September 8, 2008, http://www.grassley.senate.gov/news/news-releases/grassley-urges-continued-look-college-endowment-growth-student-affordability.

their endowments to reduce college prices and make a college education more accessible and affordable for students.[40]

There are a number of policy design choices that could be considered when imposing a payout requirement. While a payout requirement of 5%—the payout requirement for private non-operating foundations—is one option, some other level (higher or lower) could be chosen. The payout requirement could be restricted to certain endowments, such as those that exceed a certain threshold, either in absolute terms ($500 million, for example) or on a per-student basis. Payout requirements could be tied to investment earnings, or capped to not exceed investment earnings in down years. Payout requirements could also be determined on a rolling basis (5% over a 3-year period, for example). Payouts requirements could also be tied to tuition levels, metrics on student need (Pell grant recipients, for example), or students' receipt of federal student aid.[41]

Additional nuances could complicate various policy design choices. For example, if payout requirements were to be imposed in institutions with endowments per student above some predetermined level, what measure of students would be used (e.g., would the measure of students include graduate students; would the measure of students be fall enrollment, the 12-month unduplicated headcount, full-time equivalents, or some other measure?).

Opponents of a payout requirement for endowments say the approach is misguided, and have been critical of various aspects of different payout policy options. When considering payout policies that target institutions with large endowments, some have suggested that these institutions may be more likely to offer robust financial aid and perhaps more likely to have modest tuition increases over time.[42] In recent years, institutions with larger endowments have tended to have higher average payouts than institutions with smaller endowments. Thus, a payout requirement applied to all institutions regardless of endowment size could impose a greater burden on institutions with smaller endowments. Some have also questioned whether the 5% payout rate that currently applies to non-operating foundations would be appropriate for endowments, noting that operating foundations often have lower effective payout rates.[43] Finally, there are concerns that imposing a payout requirement might serve as a ceiling rather than a floor, leading institutions that would have paid out more than 5% (or whatever rate is required) to make payouts that meet the requirement but no more.[44]

Foundations subject to the 5% minimum distribution level were estimated to have a median payout rate of 5.2% in 2011.[45] Hence, half of institutions had a payout rate higher than 5.2%, while half had a payout rate lower than 5.2%. Looking at three-year averages between 2007 and 2009, the median payout was higher. For large independent foundations, estimates showed a median payout rate of 5.8% but a mean payout rate of 8.6%.[46]

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[40] For example, see Karen W. Arenson, "Senate Looking at Endowments as Tuition Rises," *New York Times*, January 25, 2008.

[41] A payout requirement based on receipt of federal student aid could be designed to identify institutions with limited payouts from endowments where students are relying on federal student aid to pay market-rate tuition.

[42] This point is made in Alexander M. Wolf, "The Problems with Payouts: Assessing the Proposal for a Mandatory Distribution Requirement for University Endowments," *Harvard Journal on Legislation*, vol. 48 (2011), pp. 591-622. The Wolf article critiques various aspects of mandatory payout proposals.

[43] Ibid.

[44] This concern has been expressed with respect to the current policy of imposing a 5% payout requirement on private non-operating foundations.

[45] CRS analysis of IRS SOI Form 990-PF public use file.

[46] Loren Renz, Understanding and Benchmarking Foundation Payout, The Foundation Center,
(continued...)

One issue raised by university representatives is restrictions on endowments imposed by donors (i.e., donor-restricted funds, discussed earlier).[47] Donor restrictions come in two forms (which often appear simultaneously): a requirement that the principal not be spent (so as to preserve the fund permanently) and a requirement that funds be spent for specified purposes. Mary Frances McCourt, representing NACUBO at a recent hearing, indicated that, in FY2014, colleges received $7.7 billion in new financial contributions to their endowments. Of those new gifts, 90% were restricted for a specific purpose by the donors.[48] Since most endowments have grown over time, and proposed payout rates tend to be below earnings over time, restrictions on not spending principal could likely be designed to be manageable for most institutions.

If a payout were to be required, payouts might come from quasi-endowments, as opposed to donor-restricted funds. As noted earlier in this report (see the "What Is an Endowment?" section), in 2014, 23% of all endowment funds were reportedly held in quasi-endowments, and 25% of endowment funds in a non-defined "other" category. Thus, across endowments as a whole, it could be possible to meet a payout requirement even if a sizable portion of endowment funds is restricted. What is not clear is how a payout requirement might affect specific institutions, where the proportion of restricted endowment funds may be higher.

Restrictions on purposes are unlikely to impose a constraint to increased payouts, either for increasing spending generally or for the purpose of slowing tuition increases, because of the fungibility of money. That is, if some endowment funds are limited to specific purposes and increased spending for those purposes is not feasible (e.g., supporting an endowed chair), increased payouts from other endowments without restrictions or endowments that are devoted to student aid can be used to meet a payout requirement. Providing aid to students is one of the most common restrictions.

Nevertheless, any legislation requiring a payout or a payout tied to a particular purpose might need a "safe harbor" so that colleges and universities would not be caught between legal restrictions on donations and payout requirements. Protections from fluctuations in asset values might also be addressed by requiring minimum payout averaged over several years.

Tax Endowments or Endowment Earnings

Another option would be to impose a tax on endowments or endowment earnings. As is the case with the payout option, there are a number of different ways such a policy could be designed. For example, the tax could only be applied to endowments of a certain size, or to institutions with "large" endowments that have increased tuition at a certain rate (more than the rate of inflation, for example).[49]

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http://foundationcenter.org/gainknowledge/research/pdf/payout2012.pdf.

[47] Testimony of Mary Frances McCourt, Senior Vice President and Chief Financial Officer, Indiana University on behalf of the National Association of College and University Business Officers, in U.S. House of Representatives, House Committee on Ways and Means Subcommittee on Oversight, *Examining the Rising Costs of Higher Education*, hearings, 114th Cong., 1st sess., October 7, 2015. Testimony available at http://waysandmeans.house.gov/event/39840295/.

[48] Ibid.

[49] The option of linking taxation of endowments to tuition increases in excess of inflation is discussed in detail in Matt Willie, "Taxing and Tuition: A Legislative Solution to Growing Endowments and the Rising Costs of a College Degree," *Brigham Young University Law Review*, December 1, 2012, pp. 1664-1702.

Endowment earnings could also be subject to tax. One option would be to impose a tax similar to the current maximum rate of 35% already imposed on tax-exempt entities for earnings from activities not related to their exempt purpose (the unrelated business income tax, UBIT).

Alternatively, the tax could be designed to be similar to the current tax on the net investment income of private foundations.[50] When the tax on investment income of private foundations was enacted, Congress stated that the purpose of the tax was to have private foundations share in the cost of government oversight of the sector.[51] Revenues from the tax, however, go to the general fund and are not earmarked for any specific purpose.

The Tax Reform Act of 2014 (H.R. 1), a tax reform proposal introduced in the 113th Congress by then Ways and Means Committee Chairman Dave Camp, proposed a flat excise tax for foundations and extended it to investment earnings of private universities and colleges. Under this proposal, private colleges and universities with endowments in excess of $100,000 per student would be subject to a 1% excise tax.[52]

A tax on endowments or endowment earnings would generate additional federal revenues.[53] These revenues could be earmarked to provide student aid across all colleges and universities, or could be treated as general fund revenues or used for other purposes. Whether a tax on endowments encourages universities to spend more is unclear: saving via the endowment becomes more expensive (as the after-tax return is lower) which would encourage payouts relative to endowment savings and accumulation. However, with lower after-tax returns, more saving may be needed to meet future endowment accumulation goals.

Limit Charitable Deductions for Gifts to Endowments

Donors making contributions to endowments can claim the charitable deduction at the time the gift is made, even if the gift is not immediately used for charitable purposes. Gifts to endowments are often spent out over long periods of time. Reducing the value of the charitable deduction for gifts that are spent out over time, or are not immediately used for charitable purposes, could change incentives for giving donations that are related to endowments.

Limiting the charitable deduction for restricted gifts to endowments or term endowments would reduce the tax incentive for making this kind of contribution. Taxpayers might choose instead to make non-restricted contributions, substituting one form of giving for another. Since limiting the deduction would reduce the tax incentive for giving to endowments, overall contributions may fall.

One option for implementing this approach could be to limit the deduction based on when the contribution is expected to be spent.[54] For example, if the contribution is expected to support

[50] As noted above, private foundations are required to pay a 2% excise tax on investment income, with the tax rate reduced to 1% in any year in which the foundation's charitable distributions exceed historical average distributions.

[51] Joint Committee on Internal Revenue Taxation, *General Explanation of the Tax Reform Act of 1969: H.R. 13270, 91st Congress, Public Law 91-172*, December 3, 1970, p. 29, https://www.jct.gov/publications.html?func=startdown&id=2406.

[52] For a description of the proposal, see Joint Committee on Taxation, *Technical Explanation of the Tax Reform Act of 2014, A Discussion Draft of the Chairman of the House Committee on Ways and Means to Reform the Internal Revenue Code: Title V – Tax Exempt Entities,* JCX-16-14, February 26, 2014, pp. 34-37, available at https://www.jct.gov/publications.html?func=startdown&id=4558. In this proposal, the number of students is the daily average number of full-time students, with part-time students accounted for on a full-time student equivalent basis.

[53] The proposal in H.R. 1 would have raised an estimated $1.7 billion between 2014 and 2023.

[54] This option, and others, are discussed in Testimony of Brian Galle, Professor of Law, Georgetown University Law (continued...)

educational activities for 10 years, some adjustment could be made to reflect the fact that a dollar spent in the future is worth less than a dollar spent today, as a result of inflation. Since this type of adjustment could become complex, it could be limited to gifts of a certain size.

Change Policies for Certain Offshore Investments

As discussed above, some have noted that the increased share of endowment assets being invested in alternative strategies, particularly hedge funds, raises concerns about the use of offshore blocker corporations to avoid UBIT. The ability to use offshore blocker corporations to avoid UBIT creates disparate tax treatment between debt-financed investments made domestically and those made offshore.[55] Some have also expressed concern that current law creates an incentive to borrow to increase the level of the endowment, which could force spending cutbacks in a downturn.[56]

In 2007, then Chairman of the Ways and Means Committee Charles Rangel introduced a bill, H.R. 3970, which addressed the disparate tax treatment of domestic and offshore investments by exempting partnership income from the UBIT.[57] Following hearings by the Senate Finance Committee in 2007,[58] a draft proposal by Senators Grassley and Wyden circulated in August 2008 proposed instead to disallow the use of offshore blocker corporations by providing look-through rules to determine the source of earnings.[59]

(...continued)

Center, in U.S. House of Representatives, House Committee on Ways and Means Subcommittee on Oversight, *Examining the Rising Costs of Higher Education*, hearings, 114th Cong., 1st sess., October 7, 2015. Testimony available at http://waysandmeans.house.gov/event/39840295/.

55 Summer A. LePree, "Taxation of United States Tax-Exempt Entities' Offshore Hedge Fund Investments: Application of the Section 514 Debt-Financed Rules to Leveraged Hedge Funds and Derivatives and the Case for Equalization," *The Tax Lawyer*, Vol. 61 (Spring 2008): 807-853.

56 Daniel Halperin, "Tax Policy and Endowments—Is Excessive Accumulation Subsidized (Part II)," *Tax Notes*, Vol. 67, No. 2 2011, pp. 125-133.

57 See CRS Report RL34249, *The Tax Reduction and Reform Act of 2007: An Overview*, by (name redacted) for an overview of the tax reform bill.

58 Offshore Tax Issues: Reinsurance and Hedge Funds, September 26, 2007, at http://www.finance.senate.gov/hearings/hearing/?id=ddb36aa0-beb0-e2f8-275e-13625c509939.

59 This proposal is discussed by Travis Patton and Jocelyn Bishop, Reporting Unrelated Business Income, *Journal of Accountancy*, February 1, 2009, at http://journalofaccountancy.com/Issues/2009/Feb/ReportingUBI.htm.

Appendix A. Endowment Data Reported to the IRS by 501(c)(3) Institutions

Data on endowments of 501(c)(3) universities and colleges are reported on Schedule D of IRS Form 990 informational returns.[60] The IRS makes available data files that contain a sample of information reported on the Form 990s.[61] The most recent year for which IRS microdata files are available is 2012.[62] Public universities and colleges are not required to file 990s and thus information on non-filing institutions' endowments is not included in the IRS data.

The IRS SOI 990 sample contains 420 colleges and 462 universities.[63] Since the IRS SOI file is a sample, and not all smaller institutions are included, the sample weights can be used to estimate the population. Overall, this sample represents 852 colleges and 540 universities.

For 2012, private colleges and universities reported total endowments of $322.3 billion.[64] Of this total, $266.8 billion (82.8%) were held in university endowments and $55.5 billion (17.2%) were in endowments held by private colleges.

In addition to collecting data on endowment balances, the IRS collects data on endowment contributions; net investment earnings, gains, and losses; grants and scholarships; other expenditures for facilities and programs; and administrative expenses. Contributions and positive net investment earnings increase endowment balances. Grants and scholarships, expenditures for facilities and programs, and administrative expenses reduce endowment balances.

In 2012, $9.2 billion was reported in contributions to 501(c)(3) university and college endowments (see **Table A-1**). This amount is equal to 3.1% of the endowment balances reported at the beginning of 2012. Net investment earnings on endowment funds were reported to be $34.0 billion in 2012, or 11.6% of total endowment funds.

The largest category of endowment spending in 2012 was for facilities and programs, $10.8 billion or 3.7% of total endowment funds. Grants and scholarships were $3.5 billion in 2012, or 1.2% of endowment funds. Administrative costs were $0.9 billion, or 0.3% of endowment funds.

[60] The IRS microdata files are available online at https://www.irs.gov/uac/SOI-Tax-Stats-2012-Charities-and-Other-Tax-Exempt-Organizations-Microdata-Files.

[61] All 501(c)(3) organizations with total assets of $50 million or more are included in the sample. Smaller organizations are randomly selected for inclusion in the sample, and sampling weights assigned.

[62] Form 990s for individual organizations are available for more recent years. Form 990s for individual organizations can be found via the National Center on Charitable Statistics (NCCS) website, http://nccsweb.urban.org/PubApps/search.php.

[63] Colleges and universities are identified using the National Taxonomy of Exempt Entities (NTEE) code reported in the IRS data. Background on NTEE categories is available at http://nccs.urban.org/classification/NTEE.cfm.

[64] The 2011 Form 990s are filed for 2011 calendar year or fiscal years that began in 2011 and ended in 2012. Some organizations use calendar year accounting periods, while others use fiscal year accounting periods.

Table A-1. Endowments of 501(c)(3) Higher Education Institutions, 2011-2012

Billions of Dollars

	2011		2012	
Beginning of Year Balance	297.2		294.1	
End of Year Balance	295.0		322.3	
	Total	**As a % of Beginning of Year Balance**	**Total**	**As a % of Beginning of Year Balance**
Contributions	$6.6	2.2	$9.2	3.1
Net Investment Earnings, Gains, and Losses	$5.1	1.7	$34.0	11.6
Grants or Scholarships[a]	$3.3	1.1	$3.5	1.2
Other Expenditures for Facilities and Programs[a]	$10.3	3.5	$10.8	3.7
Administrative Expenses[a]	$0.8	0.3	$0.9	0.3

Source: CRS analysis of the IRS SOI public use file for tax-exempt organizations.

Notes:

a. Some institutions report certain expenditures as positive, while others report these expenditures as negative. Since the three expenditure categories would reasonably be expected to be expenditures from endowments, the analysis here looks at them in absolute value terms.

Data reported by 501(c)(3) universities and colleges on their IRS Form 990 can be used to calculate payout rates. Following NACUBO, effective spending rates, or payout rates, are calculated as distribution for spending (spending on grants or scholarships and other expenditures for facilities and programs) divided by the beginning of year endowment value, net of administrative expenses. Payout rates for different endowment size classes are reported in **Table A-2**, in both dollar-weighted and equal-weighted terms.

Analysis of the distribution of payout rate for 501(c)(3) higher education institutions reveals a couple of trends. First, on average, payouts tend to be higher for institutions with larger endowments.[65] Second, payout rates for larger institutions are more concentrated. For institutions with endowments in excess of $1 billion, half of institutions have payout rates between 4.5% and 5.5%. The difference between the payout rate for institutions at the 25th percentile and those at the 50th percentile is greater for institutions with smaller endowments.

[65] The average payout in the smallest endowment size class, less than $0.025 billion, is skewed by a few small institutions reporting very large payouts (close to 100%). The median payout is below the average payout for the smallest endowment class.

Table A-2. Endowment Payouts of 501(c)(3) Higher Education Institutions

2012

		Average Payout	Average Payout	Median Payout (50th Percentile)	Payout at 25th Percentile	Payout at 75th Percentile
Endowment Size	**Number of Institutions**	**Dollar Weighted**	**Equal Weighted**			
>$1 billion	52	5.0%	4.9%	5.0%	4.5%	5.5%
$0.5 billion - $1.0 billion	40	4.5%	4.4%	4.6%	3.9%	5.0%
$0.1 billion - $0.5 billion	218	4.6%	4.4%	4.4%	3.5%	5.3%
$0.05 billion - $0.1 billion	221	4.7%	4.6%	4.3%	3.2%	5.6%
$0.025 billion - $0.05 billion	241	4.9%	4.8%	4.0%	2.4%	5.2%
<$0.025 billion	620	5.5%	5.7%	3.6%	1.8%	5.1%
Total	***1,392***	***4.9%***	***4.9%***			

Source: CRS analysis of the IRS SOI public use file for tax-exempt organizations.

Notes: The 25th percentile corresponds to the point in the distribution of payouts where 25% of institutions in the endowment size class have payouts below the payout rate at the 25th percentile, and 75% of institutions have payouts above that rate.

Appendix B. Top 100 College and University Endowments

Table B-1 lists the top 100 U.S. college and university endowments reported to NACUBO as of FY2014, including both public and private institutions. Harvard University has the largest endowment, at $35.9 billion. Harvard held 7.0% of all endowment assets as of FY2014. The second-largest endowment was held by the University of Texas system, at $25.4 billion, or 4.9% of all endowment assets. All institutions in the top 100 had endowment assets of at least $875 million as of FY2014. Taken together, the top 100 institutions listed in **Table B-1** held 75.8% of endowment assets as of FY2014.

Table B-1. Top 100 College and University Endowments

FY2014

Institution	Endowment ($ billions)	Share of Endowment Assets	Cumulative Share
Harvard University	35.9	7.0%	7.0%
University of Texas System	25.4	4.9%	11.9%
Yale University	23.9	4.6%	16.5%
Stanford University	21.4	4.2%	20.7%
Princeton University	21.0	4.1%	24.7%
Massachusetts Institute of Technology	12.4	2.4%	27.1%
The Texas A&M University System & Foundations	11.1	2.2%	29.3%
Northwestern University	9.8	1.9%	31.2%
University of Michigan	9.7	1.9%	33.1%
University of Pennsylvania	9.6	1.9%	34.9%
Columbia University	9.2	1.8%	36.7%
University of Notre Dame	8.0	1.6%	38.3%
The University of Chicago	7.5	1.5%	39.7%
University of California	7.4	1.4%	41.2%
Duke University	7.0	1.4%	42.5%
Emory University	6.7	1.3%	43.8%
Washington University in St. Louis	6.6	1.3%	45.1%
University of Virginia	5.9	1.2%	46.3%
Cornell University	5.9	1.1%	47.4%
Rice University	5.5	1.1%	48.5%
University of Southern California	4.6	0.9%	49.4%
Dartmouth College	4.5	0.9%	50.2%
Vanderbilt University	4.1	0.8%	51.0%
The Ohio State University	3.5	0.7%	51.7%

Institution	Endowment ($ billions)	Share of Endowment Assets	Cumulative Share
University of Pittsburgh	3.5	0.7%	52.4%
Johns Hopkins University	3.5	0.7%	53.1%
The Pennsylvania State University	3.4	0.7%	53.7%
New York University	3.4	0.7%	54.4%
University of Minnesota & Foundations	3.2	0.6%	55.0%
Brown University	3.0	0.6%	55.6%
University of Washington	2.8	0.5%	56.1%
University of North Carolina at Chapel Hill & Foundations	2.7	0.5%	56.7%
Purdue University	2.4	0.5%	57.1%
University of Wisconsin Foundation	2.3	0.5%	57.6%
University of Richmond	2.3	0.4%	58.0%
University of Illinois & Foundation	2.3	0.4%	58.5%
Williams College	2.3	0.4%	58.9%
Amherst College	2.1	0.4%	59.3%
Michigan State University	2.1	0.4%	59.7%
Boston College	2.1	0.4%	60.2%
Pomona College	2.1	0.4%	60.6%
California Institute of Technology	2.1	0.4%	61.0%
University of Rochester	2.0	0.4%	61.4%
Indiana University & Foundations	2.0	0.4%	61.7%
The Rockefeller University	2.0	0.4%	62.1%
Georgia Institute of Technology & Related Foundations	1.9	0.4%	62.5%
Swarthmore College	1.9	0.4%	62.9%
Grinnell College	1.8	0.4%	63.2%
Wellesley College	1.8	0.4%	63.6%
Case Western Reserve University	1.8	0.3%	63.9%
Smith College	1.8	0.3%	64.2%
The UCLA Foundation	1.7	0.3%	64.6%
Boston University	1.6	0.3%	64.9%
Carnegie Mellon University	1.6	0.3%	65.2%
Tufts University	1.6	0.3%	65.5%
The George Washington University	1.6	0.3%	65.8%
University of Nebraska	1.5	0.3%	66.1%
University of Florida Foundation, Inc.	1.5	0.3%	66.4%
Virginia Commonwealth University	1.5	0.3%	66.7%

Institution	Endowment ($ billions)	Share of Endowment Assets	Cumulative Share
University of California, Berkeley Foundation	1.5	0.3%	67.0%
University of Oklahoma	1.5	0.3%	67.3%
Washington and Lee University	1.5	0.3%	67.6%
The Kansas University Endowment Association	1.5	0.3%	67.9%
Southern Methodist University	1.5	0.3%	68.1%
Georgetown University	1.5	0.3%	68.4%
Texas Christian University	1.4	0.3%	68.7%
University of Missouri System	1.4	0.3%	69.0%
University of Delaware	1.3	0.3%	69.2%
University of Iowa & Foundation	1.3	0.2%	69.5%
University of Alabama System	1.2	0.2%	69.7%
Bowdoin College	1.2	0.2%	70.0%
Lehigh University	1.2	0.2%	70.2%
Texas Tech University System	1.2	0.2%	70.4%
Tulane University	1.2	0.2%	70.6%
University of Cincinnati	1.2	0.2%	70.9%
Syracuse University	1.2	0.2%	71.1%
Trinity University	1.2	0.2%	71.3%
Baylor University	1.2	0.2%	71.6%
Wake Forest University	1.1	0.2%	71.8%
Berea College	1.1	0.2%	72.0%
University of Kentucky	1.1	0.2%	72.2%
Yeshiva University	1.1	0.2%	72.4%
Middlebury College	1.1	0.2%	72.6%
Saint Louis University	1.1	0.2%	72.9%
University of Tennessee System	1.1	0.2%	73.1%
University of Colorado Foundation	1.1	0.2%	73.3%
Princeton Theological Seminary	1.0	0.2%	73.5%
Baylor College of Medicine	1.0	0.2%	73.7%
The University of Tulsa	1.0	0.2%	73.9%
Carnegie Institution of Washington	1.0	0.2%	74.1%
Vassar College	1.0	0.2%	74.2%
The University System of Maryland Foundation, Inc.	1.0	0.2%	74.4%
University of California, San Francisco Foundation	0.9	0.2%	74.6%
The University of Georgia Foundation	0.9	0.2%	74.8%
University of Arkansas, Fayetteville	0.9	0.2%	75.0%

Institution	Endowment ($ billions)	Share of Endowment Assets	Cumulative Share
Rutgers, the State University of New Jersey	0.9	0.2%	75.2%
Berry College, Inc.	0.9	0.2%	75.3%
Oklahoma State University Foundation	0.9	0.2%	75.5%
North Carolina State University & Related Foundations	0.9	0.2%	75.7%
University of Louisville Foundation	0.9	0.2%	75.8%
Total Top 100 Institutions	***386.9***		
Total All Institutions	**516.0**		

Source: NACUBO. Data available at http://www.nacubo.org/Research/NACUBO-Commonfund_Study_of_Endowments/Public_NCSE_Tables.html.

Notes: Canadian institutions are excluded from the top 100 list and are not included in totals from the survey of 832 U.S. institutions for FY2014. Total All Institutions figure from "Number of Respondents* to the 2014 NACUBO-Commonfund Study of Endowments, and Total Endowment Market Values, by Endowment Size and Institution Type." Some institutions manage their endowments through institutionally related foundations. These related foundations are generally treated as 501(c)(3) public charities, and not subject to tax rules that apply to other types of private foundations.

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