RUNNING ON THE "STATUS TREADMILL"?

INSTITUTIONAL ENDOWMENTS AND STUDENT FINANCIAL AID AT WEALTHY PRIVATE COLLEGES

by

ERIN BETH CIARIMBOLI

(Under the Direction of James C. Hearn)

ABSTRACT

Despite efforts to combat rising college costs via significant federal, state, and institutional investments in student financial aid, enrollment in higher education remains woefully stratified by family income. In recent years, critics have decried the most wealthy and selective colleges for failing to utilize their abundant endowment wealth to recruit, enroll, and retain a greater number of low-income students, particularly as sticker prices continue to rise at rates higher than inflation. Many of the wealthiest private institutions—with endowments well over $500 million—have Pell Grant enrollments below 20%, compared to the 35% of students nationally receiving Pell.

In response to these concerns of access, affordability, and the practice of so-called "endowment hoarding," Congress launched two inquiries targeting wealthy colleges in 2008 and 2016. The present study explores the nexus of these two requests, focusing on the role of institutional endowments in promoting access to wealthy, private colleges and universities. Two specific research questions framed this analysis. First, how do endowment spending, priorities, and policies differ among private colleges with over $1

billion in institutional assets, given multiple missions and institutional types? Second, how do these schools' endowments contribute to institutional financial aid policy and spending, and ultimately, low-income student access?

Using content analysis, I systematically analyzed a sample of 30 universities' responses to the Congressional inquiries in both 2008 and 2016. Findings suggest significant heterogeneity in institutional spending and priorities, multiple definitions of student financial need and subsequent approaches to distributing financial aid, and consequently, differential roles of endowments in supporting institutional needs. While many argue for a governmental role in imposing greater regulatory controls over endowment spending, advocates must be aware of the risks of imposing one-size-fits-all policy solutions in attempts to compel rich private institutions to spend more of their endowment resources. I conclude by offering several implications for policymakers seeking to contain college costs and encourage greater endowment spending, as well as for practitioners attempting to increase low-income student enrollment while also ensuring long-term endowment sustainability.

INDEX WORDS: college endowments, financial aid, college access, college costs, content analysis, higher education, postsecondary education

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by

ERIN BETH CIARIMBOLI

B.A., University of Kentucky, 2002

M.A., The Ohio State University, 2005

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ERIN BETH CIARIMBOLI

Major Professor:	James C. Hearn
Committee:	Erik C. Ness
	Robert K. Toutkoushian

Electronic Version Approved:

Suzanne Barbour
Dean of the Graduate School
The University of Georgia
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CHAPTER 1

INTRODUCTION

Despite more than fifty years of significant federal financial investment aiming to increase access to postsecondary education, notable stratification by socioeconomic status remains in student enrollment, choice, and outcomes. Past research has suggested that students from low-income families enroll in college at rates lower than peers from higher-income families, regardless of academic ability. When lower-income students do enroll, college choices are highly stratified: lower-income students are overrepresented at two-year colleges, for-profit universities, and less selective institutions, all of which have fewer resources to support student success and completion (Bailey & Dynarski, 2011; Calahan & Perna, 2015; Heller, 2013). These effects are particularly consequential in terms of labor market payoffs to a college degree, as a bachelor's degree recipient earns about 65% more than a high school graduate over their lifetime (Baum, Ma, & Payea, 2013). Simply put, educational attainment matters. "People understand: who goes to college—and often *which college*—determines more than ever who has entrée to the best jobs and the best life chances," note Gladieux and Swail (1999, p. 3, emphasis added).

Prospective students and families are not alone in shaping these critical choices about postsecondary pursuits. Rather, family resources, financial aid, and college and university admissions preferences interact to shape growing stratification in educational choices. Federal, state, and institutional financial aid have long been employed as a mechanism to encourage the postsecondary enrollment and persistence decisions of

lower-income students. However, financial aid has not been sufficient to eliminate college enrollment gaps between lower-income and minority students and their higher-income, white counterparts, particularly at more selective institutions (Bastedo & Jaquette, 2011; Gladieux & Swail, 1999; Posselt, Jaquette, Bielby, & Bastedo, 2012). As a result, many lower-income students are opting to enroll in institutions with lower costs yet fewer resources available to provide much-needed financial aid and academic support. This effectively lowers their chances of success and degree completion, with critical consequences for future family, work, and life outcomes.

In recent years, critics have decried the most selective and wealthy colleges for failing to utilize their abundant endowment wealth to recruit, enroll, and retain more low-income students, particularly as sticker prices continue to rise at rates higher than inflation. Many of the wealthiest private institutions, including Harvard, Dartmouth, and Washington and Lee —with endowments well over $500 million—have Pell Grant enrollments below 20%, placing them in the bottom five percent of all colleges nationally (Nichols & Santos, 2016). "Too many super wealthy colleges are playgrounds for the children of the wealthiest in our country and the world. And the leaders at too many of these institutions have mostly chosen not to prioritize educating students from low-income families," note Nichols and Santos (2016, p. 1).

Still, many of these schools continue to accrue endowment income via targeted donations from wealthy supporters, capital campaigns, and aggressive investment strategies, spending only a small proportion of their robust coffers. The pattern of "wealth begets wealth" persists, as the 40 universities with the largest endowments (of the 503 rated by Moody's) hold about two-thirds of all endowment wealth and the top 10 of these

schools hold one-third of all institutional wealth (Moody's Investors Service, 2015b). Moreover, these 40 universities have seen endowment resources increase by more than 50% since the Great Recession, dwarfing the gains of their lower-resourced peers (Woodhouse, 2015b). While much endowment spending is limited by donor-specified restrictions, critics argue that donations to wealthy schools only further the competitive gains of such institutions in academics, research, and facilities. "The idea that the superrich are just handing some of their money to the other superrich in a time of need and insecurity just seems obscene," noted Kevin Carey, of New America (Woodhouse, 2015a, para. 5). Consequently, critics have called for policies ranging from mandatory minimum payouts on these endowments to sliding scale taxes on larger endowments, asset sharing with poorer public schools, limits on charitable donations for certain types of endowment gifts, or taken a step further, removal of nonprofit status for specific schools that are receiving large taxpayer subsidizations via their nonprofit status (Klor de Alva & Schneider, 2015; Meiners & Quinn, 2016; Sherlock, Gravelle, Crandall-Hollick, & Stupak, 2015).

In response to many of these concerns, U.S. Senators Max Baucus and Chuck Grassley, the leaders of the Senate Finance Committee, sent a letter to the presidents of the 136 public and private colleges and universities with endowments of $500 million or more in January 2008. The letter, focusing primarily on endowment growth and spending on student financial aid, presented a series of 11 questions on topics including institutional enrollments, costs of attendance, tuition increases, financial aid policies, endowment spending and growth, and related subjects (see Appendix A). In the press

release accompanying what would soon be known as the "Baucus-Grassley letter," Senator Grassley spoke to the intent of the Committee's request, stating:

> Tuition has gone up, college presidents' salaries have gone up, and endowments continue to go up and up. We need to start seeing tuition relief for families go up just as fast. It's fair to ask whether a college kid should have to wash dishes in the dining hall to pay his tuition when his college has a billion dollars in the bank. We're giving well-funded colleges a chance to describe what they're doing to help students. More information will help Congress make informed decisions about a potential pay-out requirement and allow universities to show what they can accomplish on their own initiative. (Baucus & Grassley, 2008, p. 1)

However, just months later, the Great Recession's effects began to take full effect, pummeling the assets and investments of many schools, but especially those with the greatest resources. Schools with endowments of over $1 billion lost an average of 20.5% of their endowment value in the 2009 fiscal year, while smaller and less-resourced schools, which typically employ less risky and volatile investment strategies, experienced smaller losses (Kiley, 2011). Congress' attention quickly turned away from college and university endowments and toward the broad condition of the country's economy, which was in deep duress.

More recently, though, Congress has re-upped its scrutiny of the endowments of wealthy colleges and universities in light of their nonprofit tax-exempt status, endowment stabilization, and growth in post-Recession years. In February 2016, Congress again sent a letter to the 56 private nonprofit schools with endowments of over $1 billion (see Appendix B). This letter requested these institutions respond to 13 questions regarding endowment management, endowment spending and use, donations, and conflicts of interest. While it did not completely replicate the 2008 request to public and private

colleges, it contained many similar questions on the relationship between endowment spending, costs of attendance, and student financial aid (Hatch, Brady, & Roskam, 2016).

While much speculation and criticism has been directed toward colleges with large endowments—in particular, private colleges, which receive many benefits accompanying their tax-exempt status—no study has specifically explored the intersection of endowment spending policies and financial aid within this heterogeneous group of wealthy schools. Consequently, the issuance of the 2016 letter provides an ideal opportunity to explore the critical role of institutional endowments in promoting access to selective colleges and universities over time. In particular, the content of the institutional responses of 56 private colleges can be compared to their 2008 responses, thus providing a unique context for analyzing changing institutional policies and approaches to student financial aid. Even among the 56 institutions with over $1 billion in endowment assets lies significant resource heterogeneity, with endowment values ranging from $1.04 billion (University of Tulsa) to over $36 billion (Harvard University) in FY 2015 (National Association of College and University Business Officers and Commonfund Institute [NACUBO], 2017a). By analyzing the responses of schools over this time period, one can observe how some of the most selective universities view their role in providing financial aid, reducing costs and net price, and ultimately, providing access to lower- and middle-income students.

Therefore, in this dissertation, I examine the intersection between college endowments, financial aid policy, and low-income student access at the most wealthy and selective colleges universities in the country, employing a content analysis of the 2008 and 2016 institutional responses to Congress as my unit of analysis. This study does not

aim to justify the spending behaviors or choices of these schools, but rather, to explicate the current policy debate regarding institutional endowments and provide a deeper understanding of the multi-faceted issues confronting today's wealthiest multiversities. For example, is it justifiable to attempt to impose the same endowment spending policies and regulations on Amherst College, with over $1.1 million in endowment assets for each of its 1,922 students, need-blind, full-need, no-loan financial aid policies, and an average of nearly $50,000 per year in need-based student grants, with Boston University and its $78,224 in endowment resources for each of its 21,018 undergraduate students, offering merit-based aid, yet not meeting full student need? Who decides how these schools should apportion their wealth? Who *should* decide? Both schools have over $1 billion in endowments, yet are decidedly different in student enrollments, mission, and aid policies. Given the diverse priorities confronting these institutions—from small liberal arts colleges to large Research I institutions—taxation and policy advocates must be aware of the risks of imposing one-size-fits-all regulations on endowment spending and remain cognizant of potential implications for student support, faculty productivity, and long-term institutional mission and sustainability. Specifically, I ask the following questions:

1. How do the wealthiest private, nonprofit colleges and universities differ in endowment spending, priorities, and policies, given variation in institutional missions, types, and financial assets?
2. How do the endowments of these well-resourced private schools contribute to institutional financial aid policy, spending on financial aid, and ultimately, access for lower-resourced students?

These research questions will inform a comprehensive analysis of how institutional endowments have impacted changing financial aid policy, student access, and subsequent costs of attendance for lower-income students at private institutions in the 21st century. This study is particularly salient as both institutional leaders and governmental policymakers attempt to address concerns and develop solutions to rising college costs, stagnant low-income student access, and growing stratification in college resources and outcomes.

CHAPTER 2

LITERATURE REVIEW

This chapter begins by presenting an overview of the evolving role of college and university endowments in the United States, including a discussion of the role of endowments in supporting the multiple missions and goals of today's postsecondary institutions and the ever-increasing stratification in institutional resources. Next, I contextualize the recent criticisms of college endowments and spending—in particular, the role of institutional assets in promoting access and affordability in selective college enrollment. Finally, I conclude with a discussion of recent policy proposals for college and university endowment spending, taxation, and regulation.

College and university endowments: An overview

Institutional endowments represent an accumulation of numerous forms of assets over time in the form of cash, property, investments, and other holdings, providing a college or university with long-term financial stability and enabling the production of further wealth via investment income. Often comprised of thousands of smaller investment funds, endowments are not easily converted into cash; rather, universities invest endowment principal and then use the interest earned to fund the institution's mission and priorities. Endowments are mission-driven, supporting multiple institutional priorities with long-term sustainability in mind. Many donors give to endowments with specific goals, initiatives, or restrictions attached, while some suggest more self-serving

motives for giving, including trying to "purchase a bit of personal immortality" (Hansmann, 1990, p. 33). Regardless, most college and university endowments have a decidedly long-term focus: "It links past, current, and future generations. It also allows an institution to make commitments far into the future, knowing that resources to meet those commitments will continue to be available," notes the American Council on Education (2014, p. 2).

While the massive growth of university endowments has been a more recent phenomenon, philanthropy and endowments have been a stable presence at American colleges and universities since their earliest days. Early donations to colleges were frequently seen as a means to support Christian education and ensure one's place in heaven, while more significant gifts were often rewarded by re-naming the institution in support of the donor (Thelin, 2004). Such was the case when Elihu Yale donated about £562 in "bales of goods" (Thelin, 2004, p. 16), along with books and a portrait of King George I to a struggling school in Connecticut; subsequently, Yale College was named in honor of its benefactor. In the late 19th century, university philanthropy began to grow in influence, often resulting in the founding of foundations and trusts to support innovation and growth in higher education, particularly at smaller colleges in the Northeast (including Amherst, Smith, Vassar, Wellesley, and Williams). Other schools benefitted as well, including Berea College (KY), supported by Northern wealth and benefactors interested in supporting coeducation and diversity (Thelin, 2004). A gift of $17 million from Kodak's founder, George Eastman, helped the University of Rochester become one of the wealthiest schools in the country in 1932, a position which it maintained until the 1980s (Lorin, 2016).

A consistent tenet—"the prudent man principle" guided the management of most early university endowments, suggesting that trustees should "manage charitable trusts (including educational endowments) as a 'prudent man' would his/her own assets" (Cantwell, 2015, p. 179). Simultaneously, the concept of "intergenerational equity" became fundamental in endowment management, as trustees were expected to balance the needs of both present and future needs of the institution when considering investment decisions (Cantwell, 2015). This philosophy led to a more conservative approach to endowment investment decisions until the late 1960s, when the Barker Report, published by the Ford Foundation, concluded that institutional leaders had no legal obligations to prudent man principles (Cantwell, 2015). The Uniform Management of Institutional Funds Act (UMIFA) formalized many of the Barker Report's recommendations, leading to a significant shift in endowment management philosophies. In response, some of the wealthiest colleges and universities established their own investment corporations, while others hired financial firms to manage institutional endowments (Cantwell, 2015). Traditional conservative investment vehicles such as stocks, bonds, and fixed income approaches were abandoned as universities shifted to riskier investment assets. "The new prudent man is comfortable with high exposure to risk on the promise of handsome capital return," writes Cantwell (2015, p. 182).

Today, colleges and universities with larger endowments are likely to invest a greater proportion of endowment assets in riskier alternative instruments, including hedge funds, private equity, real estate, and venture capital (Ehrenberg, 2009; NACUBO, 2017b). In 2015-16, colleges with over $1 billion in endowment wealth invested 58% of their assets in alternative strategies, but only 13% in more stable domestic equities (see

Table 1). On the other hand, institutions with $25 million to $50 million and under $25 million in endowment resources invested only 17% and 10% of their endowments in riskier alternative strategies, respectively (NACUBO, 2017b). These schools, which are more tuition-dependent than their wealthier counterparts, rely on their endowment to fund a lower proportion of their operating budget, and instead, tend to invest in more stable investment instruments such as equities, cash instruments, and fixed-income strategies. While such a strategy protects the institution and its assets from the volatility and losses during times such as the Great Recession, it also limits the schools' abilities to grow their portfolios over time. For example, while colleges with endowments under $100 million experienced smaller losses in endowment size in 2015-16, the 10-year average returns of smaller endowments were much smaller than their wealthier counterparts (NACUBO, 2017d). These seemingly small differences in endowment returns can translate to millions, if not billions in endowment growth in the long-run (see Table 2).

Unequal resources: Endowment values today

It is clear that all college and university endowments were not created equal. Despite two periods of financial decline the last two decades (the 2001-02 technology bubble burst and the 2007-09 Great Recession), much postsecondary endowment wealth remains in the hands of just a few institutions. For example, The National Association of College and University Business Officers and Commonfund Institute—sponsors of the annual *NACUBO-Commonfund Study of Endowments*—found that its 805 participating institutions held about $515.1 billion in total endowment wealth in the 2016 fiscal year (NACUBO, 2017e). However, almost half of these institutions held endowments valued

Table 1
Asset Allocations for U.S. College and University Endowments and Affiliated Foundations, Fiscal Year 2016

Endowment Size	Domestic Equities (%)	Fixed Income (%)	Non-U.S. Equities (%)	Alternative Strategies (%)	Short-term Securities/ Cash/Other (%)
Over $1 Billion	13	7	19	58	3
$501 Million to $1 Billion	20	9	18	45	8
$101 Million to $500 Million	26	13	20	35	6
$51 Million to $100 Million	33	17	19	24	7
$25 Million to $50 Million	38	20	17	17	8
Under $25 Million	44	24	15	10	7

Notes: Based on average asset allocations as of June 30, 2016. All data are dollar-weighted unless otherwise specified. *Data source:* 2016 *NACUBO-Commonfund Study of Endowments* (http://www.nacubo.org/Documents/EndowmentFiles/2016-NCSE-Public-Tables_Asset-Allocations.pdf)

Table 2
Average Annual One-, Three-, Five-, and Ten Year Returns for U.S. Higher Education Endowments and Affiliated Foundations for Periods Ending June 30, 2016

Endowment Size	1-year (%)	3-year (%)	5-year (%)	10-year (%)
Over $1 Billion	-1.9	6.0	6.1	5.7
$501 Million to $1 Billion	-2.2	5.4	5.7	5.3
$101 Million to $500 Million	-2.4	4.9	5.1	4.8
$51 Million to $100 Million	-1.8	5.1	5.0	4.7
$25 Million to $50 Million	-1.6	5.2	5.3	4.7
Under $25 Million	-1.0	5.5	5.8	5.0

Data Source: 2016 *NACUBO-Commonfund Study of Endowments* (http://www.nacubo.org/Documents/EndowmentFiles/2016-NCSE-Public-Tables_Average-One-Three-Five-and-Ten-Year-Returns.pdf)

at $100 million or less (NACUBO, 2017e). Furthermore, while 93 schools reported endowments of $1 billion or more, totaling over $387 billion (75.1% of all endowment

values), just eight institutions had endowments valued at more than $10 billion (Harvard University, Yale University, University of Texas System, Stanford University, Princeton University, Massachusetts Institute of Technology, University of Pennsylvania, and the Texas A&M System), representing over $163 billion, or 31.7% of all endowment wealth (author's calculations, based on NACUBO [2017a] data). While Harvard University's endowment lost nearly $2 billion in value in fiscal year 2016 (falling to $34.5 billion, or a staggering 6.7% of total endowment values reported to NCSE), its closest competing endowment, Yale, still trailed in total assets by nearly $9 billion (NACUBO, 2017a).

Researchers have also noted wide stratification in endowment values by institutional type or sector including public versus private, highest degree offered, and Ivy League status (Toutkoushian & Paulsen, 2016). For example, while private, doctoral-granting colleges averaged $214,000 in endowment per student (median of $70,900 per student) in 2012-13, public, doctoral-granting institutions averaged only $28,000 per student (median of $16,600; College Board, 2015a). Within these nonprofit degree-granting sectors, massive stratification remains: 10 private doctoral-granting schools held 44% of total endowment wealth for *all* private, nonprofit institutions combined, while the 10 wealthiest public doctoral institutions held 37% of the entire public, four-year sector's wealth (College Board, 2015a). Sectoral stratification in endowment resources is further pronounced at the bachelor's degree level, where the average private, bachelor-granting school holds $94,200 per student in endowment (median of $36,200) and the average public, bachelor's college holds $5,200 per student (median of $1,600; College Board, 2015a). However, it is important to note that private institutions are much more dependent on endowment income to cover operating expenses, while public institutions'

endowments typically cover two percent or less of the institution's budget (Lapovsky, 2009). Unsurprisingly, there is also an extreme concentration of institutional wealth in the Ivy League; six of eight Ivies ranked in the top 20 of all institutional endowments in the 2015 NACUBO-Commonfund Study of Endowments. The endowment assets of the eight Ivies totaled over $118 billion at the end of the 2015 fiscal year, with a median endowment value of $9.9 billion—a staggering 81 times the median endowment of all institutions ($121.9 million) surveyed by NACUBO-Commonfund (author's calculations using NACUBO [2017a] data).

As Lerner, Schoar, and Wang (2008) suggest, this concentration of institutional wealth in the hands of just a small proportion of institutions further underscores the growing stratification in institutional resources, and consequently, capacity to support institutional mission, priorities, and student success. Wide variation in endowment values is frequently credited as a driver in institutional inequality with respect to financial aid, student enrollments, and student outcomes. "These results suggest an increasing skewness of endowment sizes, where the rich universities are getting richer while the rest of the schools are falling behind," they note (Lerner et al., 2008, p. 208).

The role of endowments in the 21st century

Today's endowments play a critical role in the funding of essential institutional functions. Colleges and universities depend on endowment income to fund the multiple priorities of today's multiversity: endowed professorships, research, facilities, student financial aid, and other mission-driven goals. Schools lacking stable endowment resources are less able to enroll students of high academic quality, provide financial aid

sufficient to enroll and retain lower-income students, and recruit quality tenure-track faculty members (Klor de Alva & Schneider, 2015; Winston, 1999). Endowments are particularly connected to prestige and selectivity, both highly coveted in today's postsecondary student marketplace. Colleges and universities at the top of the annual *U.S. News & World* rankings undoubtedly have the highest endowments, providing them the financial resources and willing donors necessary for success and survival (Monks & Ehrenberg, 1999; Winston, 1999, 2000). In recent years, many smaller schools have shuttered their doors or been rescued from the brink of closure (i.e., Sweet Briar College), unable to sustain the student enrollments, financial resources, and donor support necessary for long-term institutional survival (Rivard, 2013). Moody's Investment Service has predicted that up to 20% of institutions—both public and private—will experience declining revenue growth in the near future, due to both pricing constraints and limited student demand (Moody's Investors Service, 2015a)

In his 1990 work, Hansmann (1990) offers 11 hypotheses regarding institutional motivations to grow their endowments. While many of these hypotheses have been repudiated by modern scholars (see Cowan, 2008), including Hansmann himself, they contribute to the critical discussion of the role of postsecondary endowments today. In his conclusion, he states that the most convincing arguments for endowment growth include their ability to provide a buffer against financial shocks (e.g., recessions), to protect a college's reputation in the long-term, to safeguard intellectual freedom, and to pass on current institutional values to future generations (Hansmann, 1990). For example, Hansmann argues that contributions to a college's endowment allows alumni to protect the quality and reputation of their alma mater. "In effect, the students are buying

insurance against loss of reputational capital," he notes (1990, p. 27). Investment growth is also justified to protect colleges and universities against short-term funding losses, including financial downturns, loss of state or federal support, and the demands of specific donors.

However, status, prestige, and reputational growth remain among the most compelling and enduring rationales for universities to amass endowments. Large endowments provide an objective marker that a postsecondary institution is successful. "If the university has a large endowment, it can be a point of reference and pride akin to a winning football team, the prominence of a faculty member, or the ranking of the university," notes Conti-Brown (2011, p. 740). "The tendency to rank institutions, particularly universities, is strong. The absolute size of an endowment provides a clear criterion for objective ranking," he continues. Schools with large endowments are better able to compete for high-quality students, faculty, and funding, creating a perpetual cycle of endowment growth and institutional stratification. Likening endowment management to academic capitalism, Cantwell (2015) states, "Universities engage in market activities to generate profit in order to secure advantage over competitor institutions by amassing wealth, which is in turn associated with prestige and field status" (p. 174). These conditions lead to institutional inequality and stratification in higher education, and ultimately, wage inequality via higher earnings for graduates of elite institutions (Cantwell, 2015). In an organizational field comprised of institutions with ambiguous goals, differing missions, varying histories, and multiple stakeholders, endowments provide a single, concrete marker of institutional success. Large and growing endowments show that an institution has alumni and donor support, has the means to

meet institutional goals and financial challenges, and will be stable and permanent in the long-run (Waldeck, 2009). Endowments are constantly referenced in postsecondary rankings and media reports. “In short, the amount of the endowment is the most concrete and visible sign of a university’s success,” notes Waldeck (2009, p. 1810).

Critiques of college and university endowments

Nearly two decades after Hansmann’s (1990) initial research, interest in and criticism of college and university endowment spending, or “endowment hoarding,” has begun to resurface. This criticism has been primarily directed at the most well-resourced and elite schools. As of 2003, only 39 schools had endowments of over $1 billion; however, by early 2008, this had risen to 76 institutions. Critics claimed that despite significant endowment growth, spending was down. “Colleges and universities are spending less now than they have in decades and that means they are hoarding more,” noted Lynne Munson, executive director of the Common Core (Munson, 2008, p. 11). Attacks on the wealthiest schools and their “mega-endowments” have emerged from a variety of angles, including increasing privatization, lack of regulation and financial transparency, multiple tax advantages and subsidies, lack of support for low-income student enrollment, and ultimately, relatively low endowment spending.

Some critics frame their arguments in the context of academic capitalism, as higher education has become increasingly privatized and market-like. For example, Cantwell (2015) claims that as competition for student enrollments has amplified, colleges have begun to engage in a form of “financial-academic capitalism” (p. 177). "Through aggressive endowment management that seeks to earn high profits, at least

some colleges and universities participate in direct capitalist activities similar to those of Wall Street investment houses," he notes (p. 177). Others argue although private nonprofit institutions receive generous tax subsidies and benefits, that there is little accountability for how they spend their endowments. “They enjoy tax-free status without many of the responsibilities that normally go along with it,” argues Munson (2008, p. 13).

Indeed, nonprofit colleges and universities—both public and private—benefit from generous tax benefits. In addition to the tax deductions that donors receive for giving to schools, postsecondary institutions and their endowments are exempt from sales taxes, capital gains taxes, property taxes, and minimum endowment spending requirements. For example, nonprofit institutions are not required to pay state or local sales tax on items on both the services that they provide (e.g., food services and housing) and the items that they procure for institutional use or to sell, such as in the campus bookstore (Hansmann, 2013), offering significant financial benefits and savings for schools. Despite becoming more market-like and risky in their investments, endowments are also exempt from the capital gains tax that all private corporations face. In a typical year, private postsecondary endowment earnings exceed corporate investment returns, yet colleges are not subject to the 35% capital gains tax (Cantwell, 2015). For wealthier schools investing in risky yet high-return alternative investment vehicles, this could represent a potential tax savings of hundreds of millions, if not more than a billion dollars annually.

Others have criticized the lack of regulations regarding nonprofit colleges’ endowment spending rates. While private foundations and charities are required to spend at least five percent of their endowment’s value each year, colleges and universities are

exempt from similar IRS regulations. College endowment spending typically ranges from 4 to 5 percent of endowment value per year; however, most schools base spending rates on a multi-year moving average (three to seven years) in order to smooth endowment spending over time and prevent short-term variation due to economic shocks (Brown, Dimmock, Kang, & Weisbenner, 2010; Waldeck, 2009). Supporters of these exemptions argue that private foundations are much narrowly controlled and do not necessarily benefit the economy and public good in a manner akin to postsecondary institutions; thus, such regulations must be in place in order to ensure accountability of board members and donors (Waldeck, 2009). However, others argue that the lack of a minimum payout requirement for college endowments has kept schools from reducing the cost of attendance for lower-income students (Nichols & Santos, 2016). Institutions with endowments of more than $1 billion in the 2014 fiscal year averaged a 4.6% spending rate; however, only 26% had an average payout rate of 5% or more (Sherlock et al., 2015). Similarly, in an analysis of 67 private, nonprofit universities with endowments of over $500 million—with a collective wealth of nearly $150 billion in 2010—Nichols and Santos (2016) noted that about two-thirds of institutions spent less than five percent of their endowments in 2012 and about half (35 schools) spent less than 5 percent in 2013. They argue that if these 35 schools increased their endowment spending to the five percent threshold, they would generate an additional $418 million in funding, which could be used to defray costs of attendance for lower-income students (Nichols & Santos, 2016). Others argue that mandatory spending rates would negatively affect a university's spending priorities in ways that would increase tuition or prevent tuition stability, given a

natural inclination for colleges to protect, maintain, and grow endowment size (Waldeck, 2009).

Nonprofit colleges and universities also receive substantial tax breaks via property tax exemptions. Many of the wealthiest colleges are in cities with high costs of living, with high property values, but do not pay a cent in property taxes. For example, Stanford University, located in Palo Alto, CA, owns property valued at approximately $8 billion, with property tax exemptions equating to tax savings of about $80 million a year (Schneider & Klor de Alva, 2016). New York University, with 172 buildings totaling 14.9 million square feet of property in one of the most expensive cities in the world, pays $0 in property taxes (Schneider & Klor de Alva, 2016). Some schools enter into voluntary “payment in lieu of taxes” (PILOT) agreements with localities in order to support their services, but PILOT payments do not approximate the equivalent property taxes that similar residents would face. For example, George Washington University (Washington, DC) holds an estimated $1.7 billion in properties, representing $31.6 million in potential property taxes, but paid only $224,000 in PILOT 2015 (Schneider & Klor de Alva, 2016). Harvard University, which holds 650 buildings in Boston valued at about $1.5 billion, paid $5.9 million in PILOT in the same year, representing an estimated savings of over $34 million in annual property taxes (Schneider & Klor de Alva, 2016). “It's mind boggling that one entity not paying taxes has $34 billion. How do you justify that?” asked Paul Kujawski, a Massachusetts lawmaker (Schworm & Viser, 2008, para. 6). “When people can't afford to live. How do you justify not taxing them?"

While many schools counter that they are contributing to local economy and improving quality of life of nearby residents, critics argue that these benefits do not

outweigh the foregone tax earnings. Wealthy schools make the case that they are "engines of innovation," contributing to economic growth, "but Google, Microsoft, Uber and other tech giants are also engines of innovation — and, guess what, they all pay property taxes," note Schneider and Klor de Alva (2016, para. 14). In another article, the same authors argue that because of the tax subsidies that private colleges receive, private colleges are "not necessarily private" and are receiving tax benefits surpassing public institutions, which educate a greater proportion of low-and middle-income students (Klor de Alva & Schneider, 2015, p. 1). Challenging the assumption that public spillover benefits justify the tax benefits and costs of supporting the wealthiest private schools, they estimate the tax subsidies per student at high- and moderately endowed institutions, public flagship, regional, and community colleges in several states. They note an inverse relationship between the amount of tax subsidies and distribution of low- and middle-income students at the schools in their study (Klor de Alva & Schneider, 2015). For example, in Connecticut, Yale averages an estimated $69,000 in tax subsidies per student and the public flagship, University of Connecticut $23,000 per student, while Central Connecticut State and Tunxis Community College receive only $6,700 and $6,200 per student, respectively (Klor de Alva & Schneider, 2015). "In effect, the highest-endowment colleges and universities, which need government subsidies the least, get the greatest subsidy per student," they state (p. 6). They argue that a large majority of students, particularly lower-income students, attend regional state universities, where the average tax subsidy hovers around $7,000 per student (Klor de Alva & Schneider, 2015).

In light of this endowment growth, wealthy institutions have also been subject to much criticism for their ever-rising sticker prices and stagnant low-income student

enrollments (Bastedo & Jaquette, 2011; Pallais & Turner, 2007; Posselt et al., 2012). Many have argued that given the high costs of attendance for low-income students at the wealthiest schools, juxtaposed against Pell enrollment, these tax breaks and subsidies are not warranted. For example, of the 138 institutions with more than $500 million in endowments in 2013 (the so-called "$500 million club"), nearly half enrolled such a small population of Pell recipients that they fell in the bottom five percent of all institutions nationally Nichols and Santos (2016, p. 1). The 10 wealthiest schools in the country held $180 billion in endowment assets in 2012-13, yet had a median of 16% Pell enrollment, compared with the 35% of students nationally that receive Pell Grants (The College Board, 2015b), frequently considered a proxy for low-income student enrollments. What is more, at nearly 80% of the schools in the "$500 million club," average net price for low-income students exceeded 60% of annual family income (Nichols & Santos, 2016). Finally, while many of these wealthiest schools have unveiled no- or reduced-loan policies or increased financial aid for low-income students in recent years, others still leave their students saddled with debt. At Boston University and Wake Forest University, schools with $1.5 billion and $1.1 billion in endowment assets as of 2015, respectively, average low-income student debt is over $27,000 (Waldman & Wei, 2015).

Bastedo and Jaquette (2011) describe enrollment in these colleges as "a horse race in which wealthier students always remain at the head of the pack" (p. 319). Why does selective college enrollment matter? Simply put, schools with greater financial resources enroll students of higher academic quality, and consequently, can put those resources to use to increase student financial aid and improve student in-college experiences, resulting

in higher graduation rates and greater postgraduate outcomes (Bowen & Bok, 1998; Dale & Krueger, 2002; L. Zhang, 2005a, 2005b). For example, L. Zhang (2005b) argued that more selective schools tend to have better qualified and invested faculty, highly motivated students, and better student facilities, enabling students to better improve their human capital than lower-quality schools. Furthermore, schools of higher quality encourage enrollment in graduate programs, as graduates of high-quality schools are between 16% (private college graduates) and 18% (public college graduates) more likely to enroll in a graduate program than peers attending lower-quality institutions (L. Zhang, 2005a).

In May 2007, these critiques reached a climaxed as U.S. Senators Max Baucus (D-MT) and Chuck Grassley (R-IA) penned a letter to the Treasury Secretary, encouraging the IRS to ask more information of public charities on the IRS Form 990. Considered one of the first efforts to investigate endowment spending, the senators expressed concern over the "ever-growing endowment public charities," which "claim they have no legal requirement to pay out a dime" (Baucus & Grassley, 2007, para. 8). In calling for greater transparency of charities (including both hospitals and universities), the senators asked the IRS to require more information about charitable endowment spending, investments, mission and purposes, and management costs, and ultimately, to ensure that every charity's 990 Form was made publicly available. "While we always hear that sunshine is the best disinfectant, sunshine can't do its work unless we open the blinds. The sooner we open those blinds the better," they wrote (Baucus & Grassley, 2007, para. 16).

The following January (2008), Senators Baucus and Grassley penned a formal letter to the 136 public and private colleges and universities with more than $500 million in endowment assets. The letter, accompanied by 11 specific questions regarding student enrollments, financial aid and policy, tuition and cost increases, and endowment spending, growth, and management, stated:

> We would appreciate additional information about tuition costs and your institution's endowment. University endowments receive very generous tax breaks under the Internal Revenue Code. We want to better understand how these tax benefits for higher education endowments are improving education and making undergraduate studies more affordable for low and middle income families today. (Baucus & Grassley, 2008, para. 3)

While the Senate committee's request covered a range of topics, its primary focus the prudent spending of endowment assets, particularly as they relate to student costs and financial aid. Senator Grassley wrote that although his goal was not to tax colleges, he was concerned about how they were using their tax-exempt status to meet their educational missions (Grassley, 2008). "For example, Harvard's $34.6-billion endowment, as reported in a recent study by the National Association of College and University Business Officers, is roughly equal to the combined gross domestic products of the Bahamas, Barbados, Burundi, Mauritania, Somalia, and Zimbabwe," he wrote (Grassley, 2008, para. 3), raising the question of whether these colleges, with "unprecedented growth" in endowments over recent years, should be using that growth to fund additional student aid.

The Great Recession's impact

However, the Senate's investigation and potential consequences for university endowments was stymied by the 2007-09 Great Recession, which emerged in full force

just several months later. Governmental focus instead shifted to the failing economy, while colleges and universities were left to cope with their own issues—in particular, plummeting endowment values. As of 2007, the total value of all college and university endowments was approximately $467.7 billion (in inflation-adjusted 2014 dollars), but just two years later, total college and university endowment assets had plunged to $359.3 billion (in 2014 dollars; Sherlock et al., 2015). Schools with the largest endowments experienced the greatest losses, due to their investments in more volatile and less liquid alternative strategies, such as hedge funds. Those with assets of over $1.0 billion averaged losses of over 20% in the 2009 fiscal year (Kiley, 2011), while Harvard losing an astonishing 27% of its endowment value over the course of the Recession (Lorin, 2016). Universities also reacted by laying off employees, cutting undergraduate advising and student services, and suspending building projects (Conti-Brown, 2011). For example, Massachusetts Institute of Technology announced budget reductions of 10% to 15% for three years, delayed building renovations, increased student fees, postponed salary increases, closed two library branches, and eliminated eight athletic teams (Conti-Brown, 2011). While schools with smaller endowments did not emerge from the Recession unscathed, their lesser reliance on endowments to fund operating budgets helped to buffer the impact of investment losses. Total endowment values did not recover to pre-Recession levels until 2014, though many schools also reported significant investment losses in the 2016 fiscal year, as well.

Still, many institutions responded to the Senators' 2008 request by enacting new and improved financial aid policies. Prior to experiencing the full impact of the Recession, many schools targeted by the Baucus-Grassley request announced more

generous policies, designed to lower college costs for lower- and middle-income families. Schools such as Pomona College and Colby College were among the 57 schools to eliminate loans for low-income or all students in 2007 and 2008; other institutions (de Vise, 2011). Harvard and Yale, which had adopted no-loan policies in 2004, announced that students from families with incomes up to $180,000 would be expected to pay 10% or less of their income toward college costs (de Vise, 2011). However, critics argue that the schools able to introduce such generous aid packages only serve a very small, elite proportion of the college-going population, and some schools were forced to retreat from their no-loan promises after steep endowment losses during the Recession (de Vise, 2010).

Despite these policy changes designed to reduce net price and increase financial aid, low-income student enrollment has only changed marginally. Hill, Davis-Van Atta, Gambhir, and Winston (2011) analyzed student enrollments and cost data at some of the most elite private schools from 2001-02 to 2008-09. Despite significant declines in net price for the two lowest income quintiles (from $9,093 to $2,940 and $10,291 to $3,915, on average), enrollment of students from the wealthiest quintile remained relatively unchanged over time, averaging 69.7% in 2001-02 and 69.3% in 2008-09 (Hill et al., 2011). Similarly, Hillman (2012) explored the impact of no-loan programs at both public and private colleges, comparing Pell enrollment at no-loan schools with similar non-adopting peers. He found that while the adoption of no-loan polices increased low-income student enrollment, its impact was only marginal, representing a 1.8% net gain over non-adopters at private colleges, 1.3% at public schools, and 1.1% across all institutions combined (Hillman, 2012). As a majority of postsecondary institutions to not

have the financial resources to support such generous financial aid policies, Hillman (2012) suggests that future initiatives target no-loan policies specifically for Pell-eligible students, engage in intentional outreach regarding no-loan programs to low-income students, resist the temptation to take only the most high-achieving, low-income students when "crafting a class," and finally, create federal and state incentives to encourage less wealthy schools to adopt no-loan policies.

Recent policy proposals

As the economy began to rebound from the 2008 Recession and most postsecondary endowments finally surpassed their pre-Recession levels, a growing chorus of media outlets, policymakers, and legislators have once again amplified their calls for regulation of mega-endowments. In February 2016, Senator Orrin Hatch (R-UT), chairman of the U.S. Senate Committee on Finance, and Representatives Kevin Brady (R-TX) and Peter Roskam (R-IL), chairmen of the House Committee on Ways and Means, penned a letter to the 56 private colleges and universities with endowments of $1 billion or more. Like the 2008 Senate request, the letter cited large endowment returns, low endowment payout rates, rising tuition costs, and tax benefits to private, nonprofit colleges and universities as motivations for seeking further information on how private institutions were "using endowment assets to fulfill their charitable and educational purposes" (Hatch, Brady, & Roskam, 2016). This time, the legislators' request included 13 questions related to endowment management, endowment spending and use, donations, and conflicts of interest, and requested responses from the 56 schools by April 1, 2016. While no direct actions have been taken yet in response to the request, the current U.S. President has indicated interest in making sure schools are keeping student

costs under control if they are receiving “these special federal tax breaks” (Lorin, 2016, para. 2) and in April 2017, Senator Hatch announced that college and university endowments would be included in the 2017 federal tax code review (Lorin, 2017).

Consequently, several policy proposals have emerged regarding endowments, targeting burgeoning student costs, stagnant low-income student enrollments, and the stockpiling of institutional wealth at the country’s most selective colleges and universities. Among these are proposals targeting minimum endowment spending (or payout) requirements, taxes on total endowment value or endowment investment earnings, limits on the value and benefit of charitable deductions for endowment gifts, and revisions of the IRS Form 990, with most proposals aimed at private institutions of $500 million or more in endowment assets.

Some proposals have suggested that postsecondary endowments should be subject to mandatory minimum payout/spending requirements, such as the five percent minimum imposed on private or charitable foundations. Annual endowment spending rates are calculated by dividing total endowment spending in a fiscal year by the total endowment value at the beginning of that fiscal year. From fiscal years 2007 to 2016, average endowment payout rates ranged from a low of 4.2% in 2012 and 2015 to a high of 4.6% in 2007 and 2011, representing a downward trend since spending rates as high as 5.1% in 2003 (NACUBO, 2017c; Sherlock et al., 2015). However, annual spending rates also vary by institutional type and endowment size, with private nonprofit institutions spending more than public universities, on average, in each of the past ten fiscal years. In fiscal year 2016, private nonprofit colleges spent 4.4% of endowment value, on average, while publics averaged 4.0% spending (NACUBO, 2017c). Typically, average payout

rates also increase with endowment size. For example, in fiscal year 2016, schools with less than $25 million in assets spent 3.8% of endowment value, on average, while those over $1 billion spent 4.4%, on average (NACUBO, 2017c). However, because institutional formulas for determining endowment spending are often based on three, five, or seven year moving averages, estimate of payout rates often differ depending on the time frame of interest.

Accordingly, critics have claimed that institutions are spending a lower proportion of their endowments each year, while total endowment values continue to balloon. Policy proposals have ranged from a five percent minimum threshold to an eight percent recommendation (Fleischer, 2015; Sherlock et al., 2015; Waldeck, 2009). Such proposals, typically aimed at reducing costs of attendance or increase funds for financial aid, could be applied to all institutions or to certain schools with endowments past a certain threshold (e.g., greater than $1 billion total or more than $100,000 per student; Sherlock et al., 2015). Some have argued that even small increases in endowment spending could have a huge effect on access and affordability. For example, Munson (2008) calculated that a less than one percent increase in endowment spending at Harvard and Yale could allow all students to attend tuition-free, while an increase of 3% would allow 53,000 students to attend tuition-free at many private and public schools, while cutting costs in half for another 180,000 students at 29 total schools. Simulating the impact of implementing minimum spending rates of 3%, 5%, and 7% on different endowment levels, Milton and Ehrenberg (2014) found a minimal impact on endowment payouts and total endowment levels if a three percent spending minimum had been instituted from 1992 to 2010. However, a seven percent spending minimum could have resulted in a

28.2% decrease in mean endowment size from 1992 to 2010, leading to a 4.9% decrease in endowment payouts in 2010, relative to baseline spending in 1992 (Milton & Ehrenberg, 2014).

A second policy proposal has argued that the endowments or endowment investment earnings of mega-endowments should be subject to taxation, with proposed revenues directed toward federal student aid, schools supporting a larger number of Pell Grant recipients (i.e., community colleges and public regional universities), or poorer colleges, where funds could be used to recruit and retain higher-quality students and faculty (Klor de Alva & Schneider, 2015; Sherlock et al., 2015; Waldeck, 2009). In 2008, Massachusetts lawmakers proposed a 2.5% tax on schools with endowments of more than $1 billion, attempting to increase state revenues (Schworm & Viser, 2008). Similarly, some have suggested a sliding tax (0.5% to 2.0%) on private college endowments valued at more than $500 million, which would have affected 95 institutions in 2015 (Klor de Alva & Schneider, 2015). However, this same proposal suggests offsetting the tax based on amounts of institutional financial aid awarded to students (Klor de Alva & Schneider, 2015). Other proposals advocate taxation on a per-student basis, such as a one percent excise tax on university endowments of more than $100,000 per student (Milton & Ehrenberg, 2014). Finally, some propose taxing the investment income that endowments earn, akin to the 35% capital gains tax paid by private corporations. Given that many larger endowments earn returns of more than 10% in some years, estimates have suggested that such a policy could raise between $16.2 and $18 billion annually (Sherlock et al., 2015; Waldeck, 2009). If this tax was limited to private colleges only, it could raise over $11 billion each year (Sherlock et al., 2015). However, researchers

suggest that taxing mega-endowments could have a significant impact on endowment payouts in the long run, given that payout amounts are based on total endowment values (which would likely decline, due to the tax) and spending rates tend to be stable over time, regardless of endowment value (Milton & Ehrenberg, 2014)

Other proposals have also advocated for cutting the charitable or tax benefits to donors giving to endowments. Some suggest limiting tax deductions based on the time frame available to spend a contribution to an endowment (Sherlock et al., 2015; Waldeck, 2009). For example, if the institution isn't required to spend the donation within a specific amount of time (e.g., 10 years), the donor's tax benefits could be reduced. Similarly, other proposals have advocated for reducing the deductibility of restricted endowment donations, in attempt to sway donors to make non-restricted gifts (Sherlock et al., 2015). A final proposal suggests a broader reduction on the deductibility of all endowment gifts—no matter the size of the donation or restrictions on its use (Milton & Ehrenberg, 2014). However, Milton and Ehrenberg (2014) simulated the effects of reducing the tax deductibility of an endowment gift by a 50%, estimating that such a cut would have reduced endowment payouts by 12.8% in 2010. They noted that such a cut could disproportionately affect schools with smaller endowments, as they would have fewer financial reserves to lean on if the policy were enacted (Milton & Ehrenberg, 2014).

Some proposed reforms suggest changes at the margins, including revising the IRS Form 990. Some suggest that the form should include more detailed information regarding endowment size, spending, restrictions, investments, and management costs (Waldeck, 2009). While such reforms would not necessitate changes in endowment

spending, advocates argue that they would increase transparency and invite scrutiny of those endowments not spending enough or those paying millions to external investment managers (Waldeck, 2009).

Despite the many proposals suggested to influence and regulate endowment spending, college leaders and investment managers counter that they are not as easily enacted. For example, regulations restrict an institution's ability to spend below the historic dollar value of an endowment and laws require schools to honor each donor's wishes regarding gift spending (Conti-Brown, 2011). As much as 90% of new endowment gifts are restricted by donors, making the implementation of proposed payoff minimums challenging (Sherlock et al., 2015). Others counter that these restrictions on gifts are more flexible than universities suggest and there remains room for institutional spending discretion (Conti-Brown, 2011).

Others argue that minimum payout requirements may not be as effective as hoped in increasing spending, leading to a "ceiling effect" on endowment payout, and ultimately, a reduction in long-term spending (Sherlock et al., 2015). Some contend that taxing the larger endowments is fundamentally unfair, as they're offering more student financial aid and greater payouts than the majority of institutions (Sherlock et al., 2015). For example, when Massachusetts lawmakers proposed tax on endowments more than $1 billion in 2008, Harvard leaders contended that it was akin to "taxing success" (Schworm & Viser, 2008, para. 8) while others maintained that taxing the highly successful higher education sector in the state was "like Florida taxing oranges" (para. 27). On the other hand, some remain concerned about the distributional effects of any endowment spending

requirements, particularly if the primary goal is to impact the behavior of mega-endowments (Milton & Ehrenberg, 2014):

> Any policy that impacts endowments through charitable giving will have a larger relative impact on schools with smaller endowments. Unlike schools with large endowments these schools do not have as large a cache of savings from gifts before the policy went into effect. In contrast, a minimum spending rate policy would have a greater impact on larger endowments because schools with small endowments tend to have higher spending rates. (p. 8).

Furthermore, skeptics remain worried that enacting these policies could simply encourage universities to "game the system" and develop ways to offset endowment spending minimums or tax increases. Schools could respond to increased spending requirements by increasing tuition and fees, decreasing student financial aid, or "many other accounting tricks" (Miller, 2008, p. 6). Alternatively, if endowment values or endowment investment income were taxed, colleges could lower their payout rates to balance out resultant declines in endowment funds (Sherlock et al., 2015).

Finally, some contend that the matter of college endowments is but a small part of a "generally dysfunctional system of financing higher education" (Miller, 2008, p. 9) and endowment spending policies are too complex and variable to reasonably affect by a singular governmental action or policy (Lapovsky, 2009). Miller (2008) suggests that the federal government is not equipped to make decisions regarding endowment payout policy, as doing so could affect current students as well as future beneficiaries. Additionally, he suggests that endowment regulation may be a states' rights issue for public institutions. As former chairman of the University of Texas System Board of Regents, he writes, "What gives the federal government the right, in Texas language, to put their cotton pickin' hands on our money?" (Miller, 2008, p. 7).

Given these multiple policy proposals for addressing the growing endowment wealth at some colleges and universities, Sherlock et al. (2015) raise several important questions and issues to consider before applying a single solution to a multi-faceted topic. First, what are our overarching goals of endowment or tax reform? What are our broad policy objectives? Are we simply looking to change the status quo? Do we want these wealthy institutions to use more of their endowment funds for a single purpose (e.g., student financial aid)? Or do we just want to restrict or remove their tax-exempt status? Finally, is it better to just allow current endowment tax laws to remain the same? Others wonder how we can identify the "reasonable" amount of endowment that a given university needs to fulfill their mission and objectives (Hansmann, 1990).

As many of these questions remained unanswered today, Hansmann (1990) again provides still-relevant insight in his early work. For example, endowment mission statements frequently reference their long-term nature or "intergenerational equity," supporting both present and future students; however, he argues that this argument is tenuous, providing "very doubtful support for current endowment policies" (p. 14). He challenges the idea that colleges must be conservative in endowment spending in order to protect future students, given that the economy is likely to continue to grow, and consequently, students will likely be more prosperous in the future. He also contends that there is no reason for universities *not* to expect continued donations to endowments in the future when considering current spending and payout policies. Some invoke intergenerational equity as necessary to counter rising educational costs in the future and provide the same quality of education to future students. However, he argues that demand for higher education is more inelastic than expected; if endowment accumulation is

preferenced over cost subsidization, students will consume less education today. “Taxing education through endowment accumulation in the present in order to subsidize it in the future only distorts consumption of education both within and across generations, leading us to consume too little of it today and too much tomorrow,” he notes (p. 17-18). Finally, Hansmann questions universities’ decisions to invest in future generations primarily via financial investments such as stocks and bonds, rather than “educating an undergraduate, or doing research in biophysics, or adding books to the library” (1990, p. 18), which could offer a larger rate of return if given the opportunity. He cautions against making changes in endowment laws, particularly those regulating endowment accumulation, stating, “It would be premature to propose changes in the law governing endowment accumulation and, in particular, to propose measures to limit discretion of universities to accumulate large endowments” (1990, p. 40).

As of 2017, college endowment spending and regulation remains a decidedly controversial and unsettled topic, with political interest and media scrutiny unlikely to abate. While many proposals have targeted lowering costs and increasing financial aid for students, it is unlikely that a one-size-fits-all solution will satisfy the multiple stakeholders and institutions invested in today’s postsecondary education sector. Cowan (2008) aptly cautioned against such approaches and echoed Hansmann’s (1990) earlier warning, stating:

> If a tax or minimum distribution requirement were to be imposed on endowments, we would be casting aside our traditional, and current, understanding of how nonprofits should be taxed and regulated. Casting aside these understandings, however, would require a fundamental re-imagining of the nonprofit sector, that would go well beyond the relatively narrow issue of endowments. If we embarked on such a task, it would require that we rethink our notions of “charity” and “education,” our allowance of charitable gifts with perpetual restrictions, and the

> appropriate bounds of government regulation of the nonprofit sector. Perhaps someday we will accomplish this task, and can revisit endowments in light of our new understanding of the broader nonprofit universe. Until that day, Congress should avoid piecemeal reforms and follow the lesson taught by our tour of the nonprofit literature: that the fruit that is endowment income is not only low-hanging; it is also forbidden. (p. 552-553)

The present study

Despite media speculation, Congressional criticism, and many piecemeal policy proposals regarding college and university endowments, scant research has investigated the particular relationship between endowment spending and financial aid at the wealthiest private schools in the country. In the present study, I explore how the diverse colleges and universities within this group each prioritize and spend their endowment assets, focusing particularly on the relationship between endowment spending, financial aid, and student access. Given the growing sticker prices, seemingly stagnant low-income student enrollments, and ever-growing institutional wealth at these schools, this dissertation aims to contribute to a more well-informed and comprehensive policy dialogue regarding institutional endowments, accountability, and student costs and access.

CHAPTER 3

THEORETICAL FRAMEWORKS

This study's research questions are guided and explored by two disparate yet intersecting theories: Howard Bowen's (1980) renowned "revenue theory of cost" and Brendan Cantwell's (2015) more recent work on "financial-academic capitalism." In particular, Bowen's (1980) work examines the relationship between college and university revenues and spending patterns. While he finds that patterns of institutional spending vary quite widely from school to school—even among schools with similar missions, size, and scope—he concludes that schools have little incentive to cut costs. Rather:

> Within wide limits, institutions can adjust to whatever amount of money they are able to raise. When resources are increased, they find new uses for the new funds, and unit costs go up. When resources are decreased, they express keen regret and they protest, but in the end they accept the inevitable, and unit costs go down. (p. 15)

In particular, among the many ever-increasing costs postsecondary institutions face are those dictated by societal pressure or demands—"socially imposed costs" (Bowen, 1980, p. 76)—such as student recruitment and admissions costs and financial aid for lower-income and underrepresented students.

While Bowen's (1980) research speaks to the role of endowments in bolstering institutional revenue, at the time it was published, college and university endowments were cumulatively valued at only a fraction of today's holdings. Thus, I explore Cantwell's (2015) research on financial-academic capitalism and its relationship to the

competitive behavior of wealthy institutions today. In particular, Cantwell (2015) speaks to potential motivations for massive endowment growth in recent years, as postsecondary institutions compete for students and leverage their endowment assets to secure a competitive advantage over peer schools.

In the subsequent sections, I review these frameworks relevant in understanding the relationship between endowment spending and policies, financial aid expenditures, and ultimately, college student access. Following my exploration of these theories, I offer a preliminary conceptual policy framework suggesting how they might interact to shape institutional decision-making and endowment spending policy, particularly critical in an era of rising costs, significant economic and investment instability (e.g., the Great Recession), and burgeoning pressures for institutional prestige.

Revisiting Bowen: The costs of higher education

Bowen's (1980) primary research question asks, "What should American colleges and universities spend to educate their students?" (p. *xiii*). More specifically, he investigates whether postsecondary institutions might be able to operate with lesser funding per student, whether they should receive more funding, or if the funding is adequate as is. In assessing these potential costs, he suggests that it is difficult to separate educational costs (e.g., instruction, student services, institutional financial aid) from auxiliary functions (research, public service, teaching hospitals) of colleges, as well as "front-line" educational and instructional costs from "backup" expenditures such as cultural programming, student housing, and recreational programs (p. 9). However, as he argues, higher education is not as capable of capitalizing on cost-saving improvements in

technology as readily as other industries (such as the auto industry). As investments in human capital (i.e., wages) remain one of the leading costs of operating a college, schools must make a critical choice as to whether they wish to raise wages or keep per-unit costs relatively stable—a feat perhaps more feasible in industries less highly invested in their workforces. What is more, spending is increasingly influenced by peer effects, as competitors spend money to grow reputations, attract philanthropic gifts, and increase incoming student academic quality (i.e., test scores and grades). While spending on these areas may help increase a college's prestige, Bowen argues that they only serve to drive up costs without improving outcomes—"basically moves in a zero sum game" (1980, p. 23) that, in turn, force other institutional competitors to increase their expenditures.

Bowen (1980) notes that colleges and universities receive or collect revenue from multiple sources—tuition and fees from students and families, gifts from donors, endowment income, public or state appropriations, and the federal government—and doubtlessly these sources have grown in the nearly 40 years since his work was published. More importantly, as these external entities spend their scarce resources and funding on higher education, each accumulates opportunity costs as they forgo the ability to fund other goods or uses. While colleges make spending decisions regarding student admissions, courses and majors offered, and quality of teaching based on institutional mission and preferences, spending decisions are doubtlessly affected by economic conditions, market demands, consumer (student) preferences, and societal conceptions and expectations for an increasingly scrutinized higher education industry. Such "socially imposed costs" of education (Bowen, 1980, p. 76) are particularly relevant today, as

numerous organizations and other entities—including the U.S. Congress—have re-upped their scrutiny of endowment spending and student financial aid.

Socially imposed costs of higher education

American colleges receive a significant amount of institutional autonomy when prioritizing and apportioning revenues and spending, hinging on the longstanding expectation or assumption that their product will contribute to the public good. Consequently, higher education retains a critical difference from for-profit businesses, given its reliance on freedom of thought and freedom from governmental controls (Bowen, 1980). With these freedoms come certain socially constructed expectations of postsecondary institutions, such as how professors should behave, how a college should interact with its local community, and how higher education should promote social mobility through student recruitment and financial aid (Bowen, 1980). Indeed, while supporting access for low-income students is an espoused and vocalized goal of nearly all nonprofit colleges and universities today, Bowen (1980) notes that without both formal and informal social pressures, it is unlikely that many institutions would have responded to calls for equal opportunity as widely as they did at the time.

Such demands entail extensive costs—both short- and long-term—including recruiting and admitting students, providing financial aid to enroll such students, and funding programs and facilities to support student retention (Bowen, 1980). Direct costs emerge in more evident ways, such as program support or direct financial aid, while indirect yet significant costs can accumulate in the form of compliance costs or information requests. In turn, colleges are likely to shift at least a portion of these costs to

their consumers, whether to students via tuition and fees, to donors via increases in gifts, or to taxpayers through increased appropriations (Bowen, 1980). Alternatively, colleges could attempt to reduce costs in other areas, whether lowering employee wages or decreasing educational quality (e.g., increasing class sizes). Bowen (1980) also suggests that total costs need not necessarily increase; rather, organizations could simply shift organizational priorities or personnel responsibilities to balance costs increases in new areas.

Bowen (1980) offers a three-pronged "path of causation" (p. 78) for organizational response to such social demands and expectations (see Figure 1). When faced with socially or governmentally imposed pressures, organizations could voluntarily adopt such demands, motivated by a sense of self-interest or social responsibility, perhaps as a "good neighbor" gesture to the local community. Alternatively, facing intense pressure from powerful community groups or mass protests, they could change behaviors and embrace the groups' demands, without direct governmental intervention. Bowen's (1980) third potential pathway—particularly relevant to the present discussion of endowment spending and financial aid—suggests that as voices of dissent and social pressure become heard by governmental officials, mandates may be enacted and compliance becomes an organizational necessity.

However, balancing social pressures, governmental mandates, institutional autonomy, and academic freedom can become quite precarious. Institutional autonomy and academic freedom are lynchpins of American higher education; however, Bowen (1980) argues that there must be some regulation or degree of control over educational costs so that the marginal returns to higher education remain competitive when

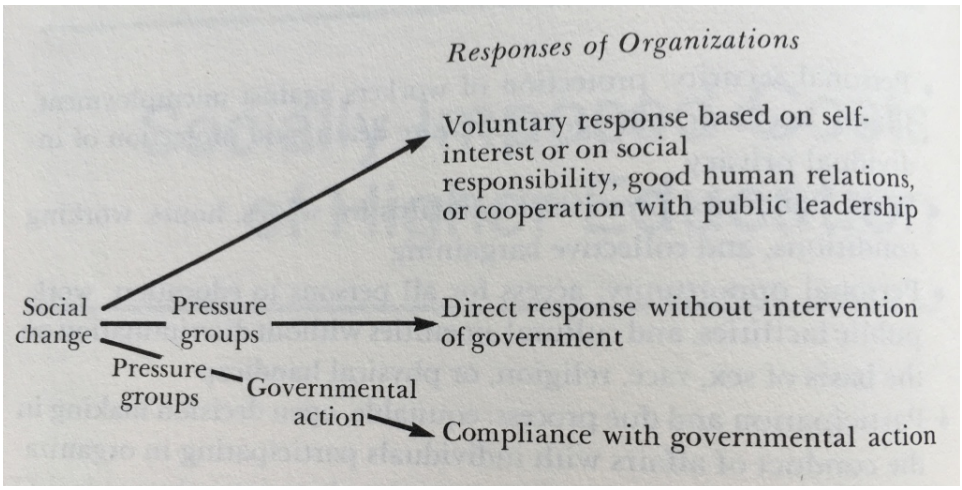

Figure 1: How organizations respond to social demands (Bowen, 1980, p. 78)

considered against other areas in which money can be spent. Recognizing the need for this balance, many colleges have responded by making PILOT (payment in lieu of taxes) payments to nearby communities and local and state governments (Bowen, 1980; Schneider & Klor de Alva, 2016). In recent years, criticism of favorable tax treatment and spending for non-educational expenses has escalated (Bowen, 1980; Cantwell, 2015; Klor de Alva & Schneider, 2015). Quite perceptively, Bowen (1980) addressed this critical yet still relevant issue nearly 40 years ago, inquiring how we reconcile the need to fulfill some of these legitimate socially imposed costs—including security, equality, and access—with the need for academic freedom and institutional autonomy. Given that both the public and private sectors of higher education are subsidized by the government, should the wealthiest of schools—stockpiling massive endowments—be spending more? Does the government have a right to intervene in such issues? *Should* the government intervene? Or do such efforts by legislatures, governing boards, and trustees to regulate

institutional costs and spending present a legitimate threat to the core values of American higher education?

Institutional spending and endowment growth

Interwoven into his historic examination of the costs of postsecondary education, Bowen (1980) offers a compelling and prescient commentary on the role of university fundraising and endowments. Although contemporary institutions' endowment holdings dwarf those of Bowen's era, his analysis remains highly relevant today. Describing the primary goals of postsecondary institutions as "educational excellence, prestige, and influence" (p. 19), Bowen suggests that though the pursuit of these goals undoubtedly cost money, they are not outcomes of the educational and learning process. Rather, institutions will relentlessly pursue these three goals, with no limit on spending and revenue growth and rarely rejecting new funding and program initiatives. Simply put, "each institution raises all the money it can" and "each institution spends all it raises" (p. 19), leading to a pattern of "ever-increasing expenditure" (p. 20). However, it is also likely that as institutions accumulate and grow endowments over time, they continue to increase their spending, in tandem. Congruent with Bowen's theory, universities draw a relatively consistent proportion of their endowments each year to spend on institutional priorities, as well as operating budgets (typically, around 5 percent), continuing to spend the maximum amount of revenues possible.

At the time of his work, only 17 of 1,300 public schools held endowments valued at over $20 million, while about 100 of 1,400 private institutions had endowments of over $20 million (Bowen, 1980). Moreover, as of 1979, endowments provided only two

percent of total revenues, on average, for all of American higher education (Bowen, 1980), but "much more for a minority of fortunate institutions" (p. 147), which remains salient today. Bowen found a clear pattern between "institutional affluence" (p. 132)—defined as spending or costs per student enrolled—and endowment values, as the most affluent fifth of institutions had many times more endowment and endowment per student than the least fifth of colleges. For example, on average, the most affluent fifth of research and doctoral universities held nearly 12 times more in total endowment than their least affluent peers, and similarly, the most affluent liberal arts colleges had average endowments per student that were an astounding 28.5 times their least affluent peer institutions (Bowen, 1980, p. 149). He suggested an endless cycle, as schools with more in endowment assets could generate greater interest income, leading to increased affluence, and in turn, greater spending per student. If schools want to grow their endowments, they must first have a surplus of funds—such as gifts or grants—that are not designated for current expenditures and can be saved indefinitely (Bowen, 1980). Thus, even if less affluent institutions begin to set funding aside for endowment building, resource stratification is likely to continue as wealthier institutions continue to save and grow their already-large endowments at faster rates.

Returning to his fundamental revenue theory of cost, Bowen (1980) elucidates the relationship between fundraising, endowments, and costs:

> Each [college] operates with a sort of hunting license which enables it to gather funds wherever it can find them and to obtain the maximum amount possible. The costs, then, are determined by success in overall fundraising and they vary widely among institutions. (p. 22)

That is, even though endowment assets continue to accumulate and grow, costs grow in tandem. Bowen (1980) explains that a college's costs are not determined in any rational

process; instead, they are determined "in large part by the amount of money they are able to raise" (p. 22). Bowen (1980) found little difference is expenditure patterns between the schools spending the most and least per student when costs were broken down by institutional type; rather, he found as a college accumulates more income, they will just spend the income proportionally across all functional areas and programs. Of these seemingly non-rational spending processes, he writes:

> There are Cadillac institutions and Pinto[1] institutions and all gradations between. Just as Cadillacs and Pintos both provide acceptable transportation, albeit with differing degrees of comfort and prestige, so rich and poor institutions may both provide acceptable education, likewise with differing degrees of excellence and prestige. (1980, p. 22)

Again, Bowen (1980) stresses that in the pursuit of prestige, there is no limit to how much a college or university will spend to reach its desired goals. This relates particularly to endowment gifts and asset growth, which typically come with proverbial "strings" or donor restrictions attached. While donations and endowment growth may increase institutional prestige and reputation, they rarely, if ever, decrease costs. "The financial problems of the rich institutions are about as severe as those of all but the most impoverished institutions," he writes. "This is especially so because whatever expenditures are once admitted into the budget become long-term commitments from which it is difficult ever to withdraw" (p. 20).

While Bowen's (1980) work on the costs of higher education remains particularly relevant given the ever-increasing sticker price of today's colleges and universities and

[1] "Pinto" refers to the Ford Pinto, which was one of the most popular and low-cost automobiles of the 1970s until defects in its gas tank were found responsible for explosions resulting in approximately 500 deaths (Auto Week, 2003). Subsequently, it gained a reputation for being one of the worst cars ever made.

public debate surrounding the relationship between rising costs, growing endowments, and the public good, I now turn to more recent research speaking to the role of endowments in institutional prestige and reputation-building. More specifically, Brendan Cantwell's (2015) work on "financial-academic capitalism" offers compelling commentary institutional motivations for "amassing wealth" (p. 177) via endowments, the increasingly competitive higher education marketplace, and ultimately, the institutional stratification and inequality that results from such behaviors.

Financial-academic capitalism

Cantwell's (2015) work on financial-academic capitalism is particularly relevant to discussion of the competitive behavior of wealthy or elite institutions. Referencing Marginson (2006) and Winston (1999)'s works on behaviors of wealthy schools and subsequent stratification both institutional resources and student markets, he argues that higher education is nested within the greater social structure, and consequently, postsecondary institutions compete for students and amass endowment assets to secure and reproduce competitive advantage over peer schools.

Endowment growth, rankings, and reputation are doubtlessly connected to student demand and enrollment through a perpetual cycle. Cantwell (2015) describes a "status treadmill effect" (p. 188) as institutions grow their wealth, and consequently, can afford to take greater risks in the future. "The result is the compounding of advantage so that there is steep inequality in endowment values," he writes. "Super endowment institutions have the resources to engage in whatever activities they please, but also the luxury to save and amass more and more wealth. Competitors are stuck on a treadmill, never able

to catch up" (p. 188). Thus, the richest schools can subsidize students costs more than their lower-resourced peers, "purchase" quality students and faculty, and ultimately, create excess demand for their services (Cantwell, 2015; Winston, 1999).

Likening the behavior of the wealthiest schools to that of Wall Street investment houses, Cantwell (2015) writes that though these colleges "could operate using endowment holdings at present expenditure levels for almost a decade without collecting a single dollar in revenue" (p. 177), they instead choose to spend only a small portion of their endowment returns. Acknowledging his apparent departure from Bowen's (1980) revenue theory of cost, Cantwell (2015) asserts that colleges are instead engaging in riskier investment practices in order to grow institutional savings. Rather than following Bowen's (1980) theory—raising all the money they can and spending all they raise—he argues that they begin accumulating wealth on the status treadmill, rather than spending it in the present. In turn, wealth's benefits are shared with both current and future faculty and students as advantages are reproduced over time (Cantwell, 2015).

Cantwell (2015) also addresses the "double tax break" (p. 188) that postsecondary institutions receive by allowing donor gifts to be incentivized on their tax returns, as well as the tax benefits the schools directly receive, such as exemption from the corporate income tax. These benefits continue, despite the non-mission-centric, revenue-generating activities that colleges engage in to increase their profits (Cantwell, 2015). However, he still grapples with the intermingled issues of higher education and the public good, spillover benefits, and the benefits of these tax treatments, and does not suggest that policymakers immediately jump to regulate these endowments. Instead, he argues, the structural conditions in the field that have created ever-growing institution stratification

would likely be unaffected by such policy interventions. Rather, to effect substantial change, "it will take creativity, imagination, determination, and favorable circumstances to dislodge the dual set of institutional and student stratification that contributes to social reproduction" (Cantwell, 2015, p. 190).

Conceptual framework

Both Bowen's (1980) and Cantwell's (2015) theories reveal a number of important factors that may influence the spending policies and priorities of private colleges and universities. While Bowen (1980) would argue that colleges are likely to raise all the money they can and spend all of the money that they raise, he found notable differences in how they apportion their spending, guided by institutional type, mission, and sector. Although these wealthy private institutions have many similarities in terms of funding sources and student enrollments, they will likely differ significantly in *how* they allocate their relatively robust resources.

However, Cantwell (2015) emphasizes the more recent yet ever-growing role of the "status treadmill" (p. 188) as these colleges attempt to enhance their rankings and reputations through endowment accumulation. Thus, instead of investing more of their ever-growing endowment resources in increased need-based financial aid, supporting their local communities, or attracting and maintaining valued faculty—less easily quantified measures of institutional success—they instead pursue institutional prestige and acclaim in long-run endowment growth. In concert with Bowen's (1980) discussion of "socially imposed costs" (p. 76) of higher education, I hypothesize that, unless subject to intense demands from pressure groups—or moreover, governmental action—these

schools will continue look to peer institutions for guidance with regard to social demands, such as increasing financial aid, low-income student enrollments, and costs of attendance. Given the multiple missions, priorities, and subsequent expenditures of today's private multiversities, I predict that colleges will instead prioritize more concrete and easily measured outcomes and spending priorities. Among those most regarded in today's educational marketplace are research spending, endowment assets and growth, and attracting students of high academic quality (typically from wealthier families). While endowment funds and distributions doubtlessly fund many institutional priorities (e.g., professorships, lectureships, research), colleges are unlikely to further tap into these funds without significant pressure or governmental action. Rather, they will continue to grow their endowments as direct markers of institutional prestige and grow their reputational capital in tandem.

My conceptual framework integrates both the work of Bowen (1980) and Cantwell (2015), acknowledging both the external and internal forces that shape endowment policies and spending, the spending constraints levied on endowments by donor and board restrictions, the relationship between endowments and student financial aid, and resulting massive stratification in institutional financial resources. I attempt to distinguish some of the unique internal factors and external pressures shaping endowment policies and spending, and in turn, the relationship between endowment spending and financial aid. In particular, I recognize the potentially powerful effects of socially imposed demands and associated costs, including peer institutions and governmental pressures (e.g., the 2008 Baucus-Grassley letter, which indirectly prompted substantial changes in financial aid policy) in shaping institutional responses and decision-making.

Thus, while acknowledging the multiple institutional priorities and external and internal forces shaping endowment policy and spending, critical questions remain: Should these colleges continue to receive favorable tax treatment and nonprofit status in exchange for providing financial aid to students, given that they continue to grow their wealth? What proportion of endowments are schools spending? How much *should* they be spending? What areas are institutions currently prioritizing in their spending? Finally, what is the role of the federal government in setting these metrics and priorities, given the necessary balance between institutional autonomy and accountability? This dissertation examines these questions, employing this proposed conceptual framework as a guide to disentangle the relationship between endowment spending and financial aid policies at some of the wealthiest private schools in the country.

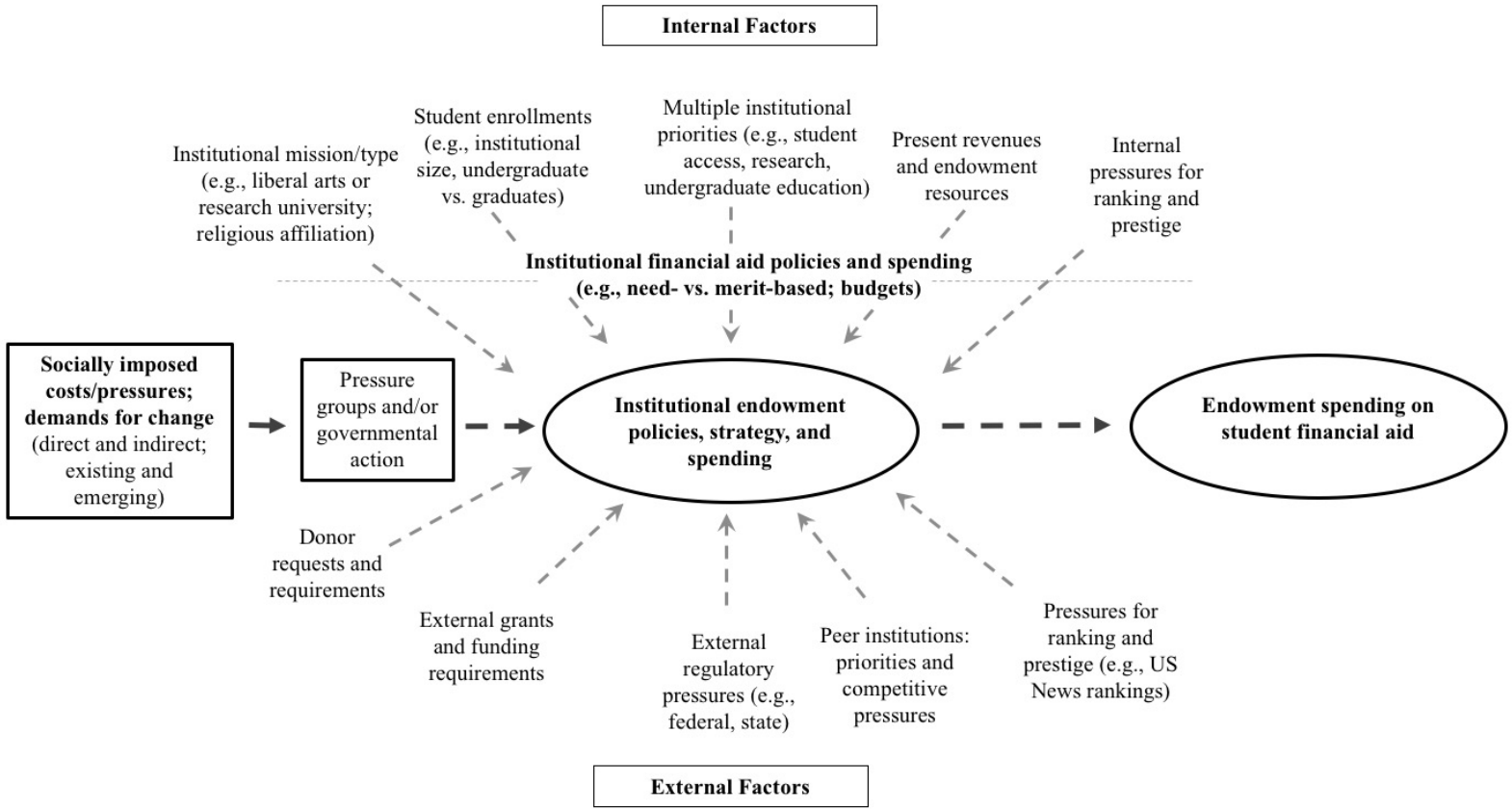

Figure 2: Conceptual framework: Endowment spending policy and student financial aid

CHAPTER 4

RESEARCH DESIGN

My first research question explores the endowment spending practices, priorities, and policies within a group of wealthy, private colleges and universities, while my second research question focus more explicitly on the role of endowments in contributing to institutional financial aid policy and spending within this same group of schools. I employ content analysis, supplemented with descriptive data, in order to examine institutional policies and practices related to endowment spending and financial aid at the private colleges subject to both the 2008 and 2016 Congressional requests. The juxtaposition of these responses to Congress—articulated in the words of the leaders of some of the country's most selective and well-endowed colleges and universities—presents a unique opportunity to compare how institutional policies and approaches may have changed over time.

Method

Content analysis provides a systematic, reliable, and replicable method for analyzing the institutional responses to the Congressional requests in both 2008 and 2016 (Krippendorff, 2004). It has been cited as a valid and rigorous method to examine several topics in higher education, including college mission statements (Morphew & Hartley, 2006), college viewbooks (Hartley & Morphew, 2008), and state merit aid programs (Ness & Lips, 2011). Content analysis allows a researcher to handle large volumes of

data within a specific context (i.e., institutional financial aid and endowments) and consequently, make "replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use" (Krippendorff, 2004, p. 18). In describing the components of content analysis (unitizing, sampling, recording/coding, reducing, inferring, and narrating), Krippendorff (2004) highlights the unique role of inference provided by the method; that is, interpreting the meaning of the data within a specific context of interest (i.e., private, well-endowed colleges). He also stresses the critical role of narration and description as the researcher interprets these results for others and explains their practical importance or policy significance.

Futhermore, Y. Zhang and Wildemuth (2009) emphasize the relationship between research questions and data collection in the process of qualitative content analysis. The choice of texts to be analyzed and the unit of analysis—"the basic unit of text to be coded during content analysis" (Y. Zhang & Wildemuth, 2009, p. 310)—are both shaped by research questions. Thus, I identified each institution's unique responses to Congress (in both 2008 and 2016) as my unit of analysis. This allowed me to complete a cross-case analysis, comparing responses to similar questions in 2008 and 2016, as well as to compare responses to the same questions across institutions. In particular, I employed the responses to Congress as my unit of analysis, rather than some other medium, because they allow us to explore changing institutional perspectives and policy approaches over time. These letters also present the responses of different institutions to the same questions in each year, allowing me to capture each school's rationale for or defense of their financial aid policies, endowment growth and spending, tuition and costs, and other priorities in their own words and unique context. Such qualitative responses can be

juxtaposed against relevant quantitative data to make inferences and conclusions about institutional mission and priorities, consistency, and relevant policy changes.

While documents such as financial statements and endowment reports may provide some of this information, they offer little more than quantitative statistics on endowment growth, spending, restrictions, and contributions to various components of institutional budgets, and are not consistent across institutions in the content and type of information they provide. Therefore, the standardized nature of the Congressional responses presents a unique opportunity to compare a large number of institutional approaches across institutions and over time and to aggregate responses from a wide variety of institutional types and sizes, which might not be possible if employing other qualitative research methods.

Data

To address my research questions regarding endowment spending and financial aid policies at wealthy, private institutions, I begin by employing data from the population of 53 private colleges and universities possessing more than $1 billion in endowment revenues in 2014-15. Specifically, I utilize the institutional responses to Congress in both 2008 and 2016 to explore my research questions. The 2008 letter asked each university 11 questions focusing primarily on endowment spending policies and growth, including financial aid policies and spending, costs of attendance, and tuition increases (see Appendix A), while the 2016 Congressional letter inquired about similar topics, asking 13 questions about endowment spending and use, management, donations, and conflicts of interest (see Appendix B). While the January 2008 Senate request applied

to 136 public and private colleges and universities with endowments over $500 million, the present study focuses on the 53 private, nonprofit institutions with undergraduate enrollments that were subject to *both* 2008 and 2016 requests (see Table 3). Public institutions were not subject to the February 2016 request; thus I cannot compare responses of public institutions in both years.

As suggested by Table 3, there is wide variation in endowment values among even the wealthiest private colleges and universities. In the 2007 fiscal year, the private university with the largest endowment—Harvard—held $34.6 billion in assets, 50 times that of the private institution with the least amount of endowment on the list (Washington and Lee, at nearly $693 million). Similarly, in fiscal year 2015, the University of Tulsa's endowment barely surpassed the $1 billion threshold set by Congress for institutions required to respond to their request. However, Harvard's endowment, which had recovered from significant losses in the Recession, was still valued at 35 times that of Tulsa's, evidence of the significant financial disparities within this population. Mean endowment values increased from $4.2 billion in FY2007 to $5.2 billion in FY2015, while median values were much lower, at $1.7 billion and $2.1 billion in the same years, respectively. Only four institutions had endowments valued lower in FY2015 than 2007: Case Western Reserve University, Wake Forest University, Berea College, and Yeshiva University. While Yeshiva University reported $348.2 million in endowment loss over this time period, Princeton University, on the other hand, reported nearly $7.0 billion in endowment growth.

Similarly, Table 4 provides a rank-ordered list of endowment values per full-time equivalent (FTE) undergraduate enrollment at the same 53 schools in 2014-15,

Table 3

Endowment Values and NACUBO Ranking for Private, Nonprofit Colleges and Universities Subject to 2008 and 2016 Congressional Endowment Requests, 2006-07 and 2014-15

FY 2015 NACUBO Endowment Rank	Institution	City	State	FY2015 Endowment (in $1,000s)	FY 2007 NACUBO Endowment Rank	FY2007 Endowment (in $1000s)	Included in Study Sample
1	Harvard University	Boston	MA	36,448,817	1	34,634,906	X
2	Yale University	New Haven	CT	25,572,100	2	22,530,200	X
4	Princeton University	Princeton	NJ	22,723,473	4	15,787,200	X
5	Stanford University	Stanford	CA	22,222,957	3	17,164,836	X
6	Massachusetts Institute of Technology	Cambridge	MA	13,474,743	6	9,980,410	X
8	Northwestern University	Evanston	IL	10,193,037	11	6,503,292	
9	University of Pennsylvania	Philadelphia	PA	10,133,569	9	6,635,187	
11	Columbia University	New York	NY	9,639,065	7	7,149,803	X
12	University of Notre Dame	Notre Dame	IN	8,566,952	14	5,976,973	X
14	The University of Chicago	Chicago	IL	7,549,710	13	6,204,189	
15	Duke University	Durham	NC	7,296,545	15	5,910,280	X
16	Washington University in St. Louis	St. Louis	MO	6,818,748	16	5,567,843	
17	Emory University	Atlanta	GA	6,684,305	17	5,561,743	X
19	Cornell University	Ithaca	NY	6,037,546	18	5,424,733	
20	Rice University	Houston	TX	5,557,479	19	4,669,544	X
21	University of Southern California	Los Angeles	CA	4,709,511	22	3,715,272	
22	Dartmouth College	Hanover	NH	4,663,491	21	3,760,234	X
23	Vanderbilt University	Nashville	TN	4,133,542	23	3,487,500	
27	New York University	New York	NY	3,576,180	31	2,161,800	X
28	Johns Hopkins University	Baltimore	MD	3,412,617	25	2,800,377	
31	Brown University	Providence	RI	3,073,349	26	2,780,798	X
35	Williams College	Williamstown	MA	2,395,100	33	1,892,055	X
37	University of Richmond	Richmond	VA	2,371,810	44	1,654,988	X
39	Boston College	Chestnut Hill	MA	2,219,600	41	1,670,092	
40	California Institute of Technology	Pasadena	CA	2,198,887	34	1,860,052	
41	Amherst College	Amherst	MA	2,193,511	42	1,662,377	X
42	Pomona College	Claremont	CA	2,098,704	38	1,760,902	
43	University of Rochester	Rochester	NY	2,050,199	39	1,726,318	X
48	Wellesley College	Wellesley	MA	1,853,503	43	1,656,565	X
49	Swarthmore College	Swarthmore	PA	1,845,799	50	1,441,232	X

Table 3 Continued

FY 2015 NACUBO Endowment Rank	Institution	City	State	FY2015 Endowment (in $1,000s)	FY 2007 NACUBO Endowment Rank	FY2007 Endowment (in $1000s)	Included in Study Sample
50	Grinnell College	Grinnell	IA	1,787,775	40	1,718,313	X
51	Smith College	Northampton	MA	1,781,763	53	1,360,966	X
52	Case Western Reserve University	Cleveland	OH	1,775,999	35	1,841,234	
53	Carnegie Mellon University	Pittsburgh	PA	1,739,474	65	1,115,740	
55	Boston University	Boston	MA	1,644,117	69	1,101,386	X
57	George Washington University	Ashburn	VA	1,616,357	64	1,147,451	X
58	Tufts University	Somerville	MA	1,593,019	49	1,452,058	X
61	Georgetown University	Washington	DC	1,528,869	73	1,059,343	
63	Texas Christian University	Fort Worth	TX	1,514,296	62	1,187,057	
64	Southern Methodist University	Dallas	TX	1,505,296	54	1,327,816	
67	Washington and Lee University	Lexington	VA	1,471,274	105	692,797	X
68	Bowdoin College	Brunswick	ME	1,392,760	90	827,714	
72	Tulane University	New Orleans	LA	1,220,464	76	1,009,129	
73	Lehigh University	Bethlehem	PA	1,213,207	72	1,085,639	X
75	Trinity University	San Antonio	TX	1,185,370	78	991,112	
77	Baylor University	Waco	TX	1,168,242	74	1,018,012	X
78	Wake Forest University	Winston Salem	NC	1,167,400	58	1,248,695	X
80	Syracuse University	Syracuse	NY	1,166,109	71	1,086,143	
85	Berea College	Berea	KY	1,101,476	68	1,102,272	X
86	Middlebury College	Middlebury	VT	1,101,054	84	936,354	
88	Saint Louis University	St. Louis	MO	1,093,348	81	959,486	
91	Yeshiva University	New York	NY	1,061,440	51	1,409,576	
92	University of Tulsa	Tulsa	OK	1,037,169	85	915,320	X
		Minimum		1,037,169		692,797	
		Maximum		36,448,817		34,634,906	
		Mean		5,161,908		4,157,081	
		Median		2,098,704		1,718,313	

Notes: Ranks indicate placement among all public and private institutions. Three private institutions, The Rockefeller University, Baylor College of Medicine, and Princeton Theological Seminary, are excluded from this analysis, as they do not enroll undergraduates. Institutions included in study sample made both 2008 and 2016 responses to Congress publicly available or provided them to researcher. *Data sources: 2008 NACUBO Endowment Study* and 2016 *NACUBO-Commonfund Study of Endowments.*

Table 4

Endowment per FTE Undergraduate Enrollment Rank and Value and Total Endowment Rank and Values for all Private, Nonprofit Colleges and Universities Subject to 2008 and 2016 Congressional Endowment Requests, Sorted by 2014-15 Endowment per FTE

FY 2015 Endowment per FTE Undergrad Rank	Institution	FY 2015 Endowment per FTE	FY 2015 Private Total Endowment Rank	FY2015 Endowment (in $1,000s)
1	*Princeton University*	4,162,571	3	22,723,473
2	*Harvard University*	3,854,163	1	36,448,817
3	*Yale University*	3,612,899	2	25,572,100
4	*Massachusetts Institute of Technology*	3,002,394	5	13,474,743
5	*Stanford University*	3,001,480	4	22,222,957
6	California Institute of Technology	2,285,745	25	2,198,887
7	*Rice University*	1,392,154	15	5,557,479
8	University of Chicago	1,314,136	10	7,549,710
9	Pomona College	1,287,548	27	2,098,704
10	*Swarthmore College*	1,173,426	30	1,845,799
11	Northwestern University	1,164,785	6	10,193,037
12	*Williams College*	1,147,628	22	2,395,100
13	*Amherst College*	1,141,265	26	2,193,511
14	*Columbia University*	1,125,139	8	9,639,065
15	*Dartmouth College*	1,087,822	17	4,663,491
16	*Grinnell College*	1,056,605	31	1,787,775
17	Washington University in St. Louis	940,906	12	6,818,748
18	*University of Notre Dame*	929,070	9	8,566,952
19	University of Pennsylvania	920,648	7	10,133,569
20	*Emory University*	900,364	13	6,684,305
21	*Duke University*	896,712	11	7,296,545
22	*Washington and Lee University*	821,482	41	1,471,274
23	Bowdoin College	778,949	42	1,392,760
24	*Wellesley College*	751,928	29	1,853,503
25	*University of Richmond*	703,593	23	2,371,810
26	*Smith College*	687,409	32	1,781,763
27	*Berea College*	674,511	49	1,101,476
28	Vanderbilt University	612,105	18	4,133,542
29	Trinity University	523,804	45	1,185,370
30	Johns Hopkins University	487,586	20	3,412,617
31	*Brown University*	468,856	21	3,073,349
32	Cornell University	407,694	14	6,037,546
33	Yeshiva University	403,743	52	1,061,440

Table 4 Continued

Endowment per FTE Undergraduate Enrollment Rank and Value and Total Endowment Rank and Values for all Private, Nonprofit Colleges and Universities Subject to 2008 and 2016 Congressional Endowment Requests, Sorted by 2014-15 Endowment per FTE

FY 2015 Endowment per FTE Undergrad Rank	Institution	FY 2015 Endowment per FTE	FY 2015 Private Total Endowment Rank	FY2015 Endowment (in $1,000s)
34	Middlebury College	397,492	50	1,101,054
35	Case Western Reserve University	352,171	33	1,775,999
36	Carnegie Mellon University	301,887	34	1,739,474
37	*University of Tulsa*	295,322	53	1,037,169
38	*Tufts University*	294,078	37	1,593,019
39	*University of Rochester*	291,056	28	2,050,199
40	*Wake Forest University*	250,730	47	1,167,400
41	Boston College	239,001	24	2,219,600
42	University of Southern California	237,962	16	4,709,511
43	Southern Methodist University	229,922	40	1,505,296
44	*Lehigh University*	222,362	44	1,213,207
45	Georgetown University	210,733	38	1,528,869
46	Texas Christian University	178,111	39	1,514,296
47	*George Washington University*	155,210	36	1,616,357
48	Tulane University	150,563	43	1,220,464
49	*New York University*	132,431	19	3,576,180
50	Saint Louis University	124,244	51	1,093,348
51	*Baylor University*	83,043	46	1,168,242
52	*Boston University*	78,224	35	1,644,117
53	Syracuse University	67,192	48	1,166,109
	Minimum	67,192		1,037,169
	Maximum	4,162,571		36,448,817
	Mean	905,865		5,161,908
	Median	674,511		2,098,704

Notes: Institutions in *italics* represent the 30 schools in qualitative sample. Ranks indicate placement among private, nonprofit institutions only. Three private institutions, The Rockefeller University, Baylor College of Medicine, and Princeton Theological Seminary, are excluded from this analysis, as they do not enroll undergraduates. *Data sources:2008 NACUBO Endowment Study,* 2016 *NACUBO-Commonfund Study of Endowments,* and Integrated Postsecondary Education Data System (IPEDS) *12-Month Enrollment*.

juxtaposed aside the same institutions' total endowment values and rank. This table provides a first glimpse at how number of undergraduate students enrolled at an

juxtaposed aside the same institutions' total endowment values and rank. This table provides a first glimpse at how number of undergraduate students enrolled at an

institution can re-shape perceptions of a school's financial resources and capacity. For example, the top five ranked schools in Table 4 remain the same as in Table 3, with an astounding $3 to $4 million per enrolled undergraduate at each institution. However, other schools' rankings shift quite appreciably. For example, CalTech catapults 19 positions, from 25th to 6th, when resources are re-framed by undergraduate enrollments. Similarly, many liberal arts colleges, including Pomona, Swarthmore, Williams, Amherst, and Grinnell, move up to the top 20 institutions, due to their smaller undergraduate enrollments. However, other schools, enrolling a larger number of undergraduates, slip to the bottom of the rankings, including Cornell University, Boston College, the University of Southern California, New York University, and Boston University.

My research questions will be analyzed qualitatively, examining institutional responses to the 2008 and 2016 Congressional requests for information on endowments, and supplemented with descriptive data from the Integrated Postsecondary Education Data System (IPEDS). The written responses to Congressional requests were obtained using a multi-tiered approach. First, I undertook a comprehensive internet search for both 2008 and 2016 responses that were publicly available on institutional websites. Examples of internet search terms included (but were not limited to) "2008 Baucus-Grassley response endowment," "2008 Senate endowment response," and "2016 Congress

endowment response." Similar search terms were also combined with the names of colleges subject to these requests (e.g., "Brown 2008 senate endowment response.") in order to search for the responses of specific institutions. Next, I completed a similar search on each of the 53 institutions' websites (e.g., www.brown.edu) to locate responses that had been posted on college or university websites. Through this process, I obtained both the 2008 and 2016 written responses for 13 of the 53 private institutions.

After my initial internet research was exhausted, I contacted individuals and offices at the remaining 40 institutions via email. In these emails, I explained the broad goals of my research and the information I was seeking from each school (i.e., the 2008 response, 2016 response, or both; see Appendices C, D, and E for the text of emails). Requests were sent to two distinct offices or departments at each institution. First, an email was sent to communications, public relations, media relations, marketing, or news departments at each school, depending on organizational nomenclature and structure of the institutional offices. A similar email was directed to the Institutional Research office at each college or university. After two weeks, if no response had been received, a follow-up email was sent to the same recipients of the initial email. Many schools were willing to provide the missing information, while several schools actively declined to provide the letters. Some colleges "couldn't locate" their institution's response, and finally, others did not respond to my multiple requests. In total, I obtained complete responses from 17 of the remaining 40 institutions, for a total institutional sample of 30 colleges and university responses to both the 2008 and 2016 requests. I limited my analysis sample to institutions with responses for both years, in order to permit analysis of their changing responses over time.

Sample characteristics

Table 5 provides an overview of the endowment holdings of the 30 private colleges and universities included in my study sample in both 2006-07 and 2014-15, ordered by endowment values per FTE undergraduate student. Similar to the results provided in Table 3, the mean endowment value of these schools increased from $5.4 billion in FY2007 to $6.6 billion in FY2015, while the median remained slightly lower in both years, increasing from $1.7 billion to $2.3 billion. In terms of endowment per enrolled undergraduate, Boston University held only $53,416 per student in FY2007, compared with Harvard, at $3.5 million per student. While Boston University remained at the bottom of this list in FY2015 ($78,000 per FTE undergraduate), Princeton had risen to the top of the rankings, holding an astounding $4.2 million in endowment per student—53 times that of Boston University.

Tables 6 and 7 present additional institutional characteristics for the 30 colleges and universities included in my qualitative analysis. Table 6 again reveals the wide variation in institutional missions and student enrollments within this group of wealthy, private schools. For example, nine colleges were categorized as Baccalaureate Colleges—Arts & Sciences, otherwise known as liberal arts colleges. Most of these colleges, with the exceptions of the University of Richmond, Smith College, Williams College, enrolled only undergraduates. On the other hand, the remaining 21 institutions were research-focused universities, many with large graduate student enrollments. The smallest institution, Swarthmore College, enrolled 1,465 and 1,573 students in FY2007 and FY2015, respectively, while the largest by far, New York University, increased enrollment from 36,742 students (undergraduate and graduate enrollees) in FY2007 to

Table 5

Endowment Values and Endowment per FTE Enrollment, 30 Private Nonprofit Colleges and Universities included in Qualitative Sample, sorted by Endowment per FTE Undergraduate Enrollment, 2006-07 and 2014-15

Institution	FY2015 Endowment (in $1,000s)	Endowment per FTE, 2014-15	FY2007 Endowment (in $1000s)	Endowment per FTE, 2006-07
Princeton University	22,723,473	4,162,571	15,787,200	3,269,248
Harvard University	36,448,817	3,854,163	34,634,906	3,454,164
Yale University	25,572,100	3,612,899	22,530,200	3,431,866
Massachusetts Institute of Technology	13,474,743	3,002,394	9,980,410	2,441,392
Stanford University	22,222,957	3,001,480	17,164,836	2,451,069
Rice University	5,557,479	1,392,154	4,669,544	1,543,141
Swarthmore College	1,845,799	1,173,426	1,441,232	983,776
Williams College	2,395,100	1,147,628	1,892,055	925,210
Amherst College	2,193,511	1,141,265	1,662,377	1,014,263
Columbia University	9,639,065	1,125,139	7,149,803	937,802
Dartmouth University	4,663,491	1,087,822	3,760,234	908,050
Grinnell College	1,787,775	1,056,605	1,718,313	1,067,938
University of Notre Dame	8,566,952	929,070	5,976,973	710,614
Emory University	6,684,305	900,364	5,561,743	743,847
Duke University	7,296,545	896,712	5,910,280	754,729
Washington and Lee University	1,471,274	821,482	692,797	391,190
Wellesley College	1,853,503	751,928	1,656,565	660,776
University of Richmond	2,371,810	703,593	1,654,988	504,570
Smith College	1,781,763	687,409	1,360,966	513,378
Berea College	1,101,476	674,511	1,102,272	682,944
Brown University	3,073,349	468,856	2,780,798	481,941
University of Tulsa	1,037,169	295,322	915,320	322,069
Tufts University	1,593,019	294,078	1,452,058	311,667
University of Rochester	2,050,199	291,056	1,726,318	317,864
Wake Forest University	1,167,400	250,730	1,248,695	302,641
Lehigh University	1,213,207	222,362	1,085,639	219,232
The George Washington University	1,616,357	155,210	1,147,451	108,970
New York University	3,576,180	132,431	2,161,800	96,148
Baylor University	1,168,242	83,043	1,018,012	85,339
Boston University	1,644,117	78,224	1,101,386	53,416
Minimum	1,037,169	78,224	692,797	53,416
Maximum	36,448,817	4,162,571	34,634,906	3,454,164
Mean	6,593,039	1,146,464	5,364,839	989,642
Median	2,282,661	859,097	1,722,316	696,779

Note: Sample includes private institutions subject to both 2008 and 2016 Congressional endowment requests and made responses available to researcher for both years. *Data sources: 2008 NACUBO Endowment Study, 2016 NACUBO-Commonfund Study of Endowments,* and Integrated Postsecondary Education Data System (IPEDS) *12-Month Enrollment*.

Table 6

Institutional Characteristics, 30 Private Nonprofit Colleges and Universities Included in Qualitative Sample, 2006-07 and 2014-15

Institution	Carnegie Classification (2005/2010 Basic)	Religiously Affiliated	FTE Undergraduate Enrollment		FTE Graduate Enrollment (if applicable)	
			2006-07	2014-15	2006-07	2014-15
Amherst College	Baccalaureate College--Arts & Sciences		1639	1922	0	0
Baylor University	Research University (high research activity)	Y	11929	14068	1357	1740
Berea College	Baccalaureate College--Arts & Sciences		1614	1633	0	0
Boston University	Research University (very high research activity)		20619	21018	7504	8683
Brown University	Research University (very high research activity)		5770	6555	1688	2068
Columbia University	Research University (very high research activity)		7624	8567	12137	18754
Dartmouth College	Research University (very high research activity)		4141	4287	1349	1837
Duke University	Research University (very high research activity)	Y	7831	8137	6574	5082
Emory University	Research University (very high research activity)	Y	7477	7424	5153	5350
George Washington University	Research University (high research activity)		10530	10414	7366	8495
Grinnell College	Baccalaureate College--Arts & Sciences		1609	1692	0	0
Harvard University	Research University (very high research activity)		10027	9457	14555	12454
Lehigh University	Research University (high research activity)		4952	5456	1170	1198
Massachusetts Institute of Technology	Research University (very high research activity)		4088	4488	5991	6689
New York University	Research University (very high research activity)		22484	27004	14258	17968
Princeton University	Research University (very high research activity)		4829	5459	2303	2914
Rice University	Research University (very high research activity)		3026	3992	2460	3264
Smith College	Baccalaureate College--Arts & Sciences		2651	2592	452	619
Stanford University	Research University (very high research activity)		7003	7404	6197	6928
Swarthmore College	Baccalaureate College--Arts & Sciences		1465	1573	0	0
Tufts University	Research University (very high research activity)		4659	5417	3793	3931
University of Notre Dame	Research University (very high research activity)	Y	8411	9221	2038	3059
University of Richmond	Baccalaureate College--Arts & Sciences		3280	3371	141	231
University of Rochester	Research University (very high research activity)		5431	7044	2889	3562
University of Tulsa	Research University (high research activity)	Y	2842	3512	413	534
Wake Forest University	Research University (high research activity)		4126	4656	1379	2064
Washington and Lee University	Baccalaureate College--Arts & Sciences		1771	1791	6	0
Wellesley College	Baccalaureate College--Arts & Sciences		2507	2465	0	0
Williams College	Baccalaureate College--Arts & Sciences		2045	2087	46	73
Yale University	Research University (very high research activity)		6565	7078	4722	6991
	Minimum		1465	1573	0	0
	Maximum		22484	27004	14555	18754
	Mean		6098	6659	3531	4150
	Median		4744	5437	1863	2491

Data Source: Integrated Postsecondary Education Data System (IPEDS) *12-Month Enrollment* and *Institutional Characteristics.*

Table 7

Acceptance Rate, Enrollment Yield, and U.S. News & World Report Category and Ranking, 30 Private Nonprofit Colleges and Universities Included in Qualitative Sample, 2006-07 and 2014-15

Institution	Acceptance Rate		Enrollment Yield		*U.S News & World Report* "Best Colleges" Category and Rank	
	2006-07	2014-15	2006-07	2014-15	2007	2015
Amherst College	18.6%	13.8%	37.8%	40.0%	*National Liberal Arts Colleges,* 2	*National Liberal Arts Colleges,* 2
Baylor University	42.5%	55.4%	30.6%	19.3%	*National Universities,* 81 (tie)	*National Universities,* 71 (tie)
Berea College	29.3%	33.7%	72.9%	75.0%	*Comprehensive Colleges-Bachelor's (South),* 1	*National Liberal Arts Colleges,* 69 (tie)
Boston University	56.7%	34.5%	23.6%	20.9%	*National Universities,* 57 (tie)	*National Universities,* 42 (tie)
Brown University	13.8%	8.7%	58.0%	58.7%	*National Universities,* 15	*National Universities,* 16 (tie)
Columbia University	11.6%	6.9%	58.3%	62.2%	*National Universities,* 9 (tie)	*National Universities,* 4 (tie)
Dartmouth College	15.7%	11.5%	49.5%	51.9%	*National Universities,* 9 (tie)	*National Universities,* 11
Duke University	23.7%	11.4%	43.2%	47.9%	*National Universities,* 8	*National Universities,* 8 (tie)
Emory University	36.6%	26.8%	28.6%	28.6%	*National Universities,* 18	*National Universities,* 21 (tie)
George Washington University	37.5%	43.8%	33.1%	28.9%	*National Universities,* 52 (tie)	*National Universities,* 54 (tie)
Grinnell College	44.8%	28.0%	27.7%	25.6%	*National Liberal Arts Colleges,* 14 (tie)	*National Liberal Arts Colleges,* 19 (tie)
Harvard University	8.9%	6.0%	83.4%	80.9%	*National Universities,* 2	*National Universities,* 2
Lehigh University	39.1%	34.3%	29.1%	32.9%	*National Universities,* 33	*National Universities,* 40 (tie)
Massachusetts Institute of Technology	13.3%	7.9%	66.2%	72.1%	*National Universities,* 4 (tie)	*National Universities,* 7
New York University	36.2%	35.4%	36.9%	32.8%	*National Universities,* 34 (tie)	*National Universities,* 32
Princeton University	10.2%	7.4%	69.3%	66.2%	*National Universities,* 1	*National Universities,* 1
Rice University	23.7%	15.1%	34.3%	35.5%	*National Universities,* 17	*National Universities,* 19
Smith College	53.1%	42.2%	37.1%	32.7%	*National Liberal Arts Colleges,* 19	*National Liberal Arts Colleges,* 19 (tie)
Stanford University	10.9%	5.1%	67.4%	78.2%	*National Universities,* 4 (tie)	*National Universities,* 4 (tie)
Swarthmore College	19.0%	17.0%	40.1%	43.2%	*National Liberal Arts Colleges,* 3	*National Liberal Arts Colleges,* 3
Tufts University	26.8%	17.2%	31.3%	41.0%	*National Universities,* 27 (tie)	*National Universities,* 27 (tie)
University of Notre Dame	27.3%	21.1%	58.4%	53.1%	*National Universities,* 20	*National Universities,* 16 (tie)
University of Richmond	45.8%	31.8%	30.5%	25.9%	*National Liberal Arts Colleges,* 34 (tie)	*National Liberal Arts Colleges,* 30 (tie)
University of Rochester	43.9%	36.4%	22.9%	22.6%	*National Universities,* 34 (tie)	*National Universities,* 33 (tie)
University of Tulsa	75.7%	40.3%	32.1%	24.9%	*National Universities,* 88 (tie)	*National Universities,* 88 (tie)
Wake Forest University	42.6%	34.4%	36.0%	33.6%	*National Universities,* 30	*National Universities,* 27 (tie)

Table 7 Continued

Institution	Acceptance Rate		Enrollment Yield		*U.S News & World Report* "Best Colleges" Category and Rank	
	2006-07	2014-15	2006-07	2014-15	2007	2015
Washington and Lee University	27.5%	19.5%	38.9%	41.5%	*National Liberal Arts Colleges,* 17 (tie)	*National Liberal Arts Colleges,* 14
Wellesley College	36.1%	30.1%	40.9%	41.8%	*National Liberal Arts Colleges,* 4	*National Liberal Arts Colleges,* 4
Williams College	19.1%	19.3%	46.6%	44.8%	*National Liberal Arts Colleges,* 1	*National Liberal Arts Colleges,* 1
Yale University	9.7%	6.3%	70.3%	69.8%	*National Universities,* 3	*National Universities,* 3
Minimum	8.9%	5.1%	22.9%	19.3%		
Maximum	75.7%	55.4%	83.4%	80.9%		
Mean	30.0%	23.4%	44.5%	44.4%		
Median	27.4%	20.3%	38.4%	41.2%		

Notes: Acceptance rate is equal to the total number of students admitted to an institution, defined as those granted an official offer to enroll in a given year, divided by the total number of applicants, defined as those students who have fulfilled institutional admission requirements and been notfied of an official admissions decision. Yield rate is defined as the number of students enrolled, defined as those who "applied, were admitted, and enrolled (full or part time)," divided by total number of students admitted. Data Sources: Integrated Postsecondary Education Data System (IPEDS) *Admissions and Test Scores* and US News and World Report Best Colleges 2007 and 2015 (published in August 2006 and September 2014, respectively).

almost 45,000 students in FY2015. Five institutions, or seventeen percent of the sample, were religiously affiliated.

Table 7 provides information regarding the selectivity and rankings of the 30 sample institutions. On the whole, this table suggests that these schools became more selective over time, admitting 30.0% of applicants, on average, in 2006-07 and 23.4% in 2014-15. Even the least selective institution in the group in 2006-07, the University of Tulsa (75.7% acceptance rate), increased their selectivity by 2014-15 to 40.3%. Harvard and Yale accepted fewer than 10% of total applicants in both years, while the number of schools accepting 10% of applicants or fewer grew to seven in 2014-15. Stanford cut its acceptance rate by more than half, admitting 10.9% of applicants in 2006-07 and only 5.1% in 2014-15. I also present statistics regarding enrollment yield in this table, which shows that, on average, around 44% to 45% of students accepted to these schools subsequently enrolled. Notably, in 2014-15, nearly 70% of Yale's admittees, 75% of Berea's, 78% of Stanford's, and 81% of Harvard's admitted students accepted a place in the institution's first-year class. The last two columns demonstrate the consistent and visible presence of this group within *U.S. News & World Report's National Universities* and *National Liberal Arts Colleges* ranking lists in both 2006-07 and 2014-15. What is more, many of the sample schools appeared in the top ten of these ranking lists in both years, with rankings relatively consistent over the eight-year period.

Finally, Table 8 provides a comparison of institutional assets, undergraduate FTE enrollments, and endowment values per FTE at both the 53 private schools (enrolling undergraduates) subject to the 2008 and 2016 Congressional requests and the 30 schools included in the study sample. While the intent of my sample was not to be representative,

this table shows that, on the whole, median endowment values were relatively similar in both years, while sample institutions were slightly smaller, on average (and median) in both years. Additionally, sample institutions had larger endowments per FTE enrollment and larger endowment values, on average, in both years.

Table 8
Comparison of Total Endowment Value, Undergraduate Enrollments, and Endowment per FTE, 53 Colleges and Universities Subject to Congressional Requests and 30 Institutions in Study Sample, 2007-08 and 2014-15

	Population (53 schools)		**Study Sample (30 institutions)**	
	2006-07	2014-15	2006-07	2014-15
Endowment Value (mean, in $1000s)	4,157,081	5,161,908	5,364,839	6,593,039
Endowment Value (median, in $1000s)	1,718,313	2,098,704	1,722,316	2,282,661
FTE Undergraduate Enrollment (mean)	6,409	6,973	6,098	6,659
FTE Undergraduate Enrollment (median)	5,547	6,547	4,744	5,437
Endowment per FTE (mean)	$780,540	$905,865	$989,642	$1,146,464
Endowment per FTE (median)	$481,941	$674,511	$696,779	$859,097

Note: Sample includes private institutions subject to both 2008 and 2016 Congressional endowment requests and made responses available to researcher for both years. *Data sources: 2008 NACUBO Endowments Study, 2016 NACUBO-Commonfund Study of Endowments,* and Integrated Postsecondary Education Data System (IPEDS) *12-Month Enrollment*.

Data coding and analysis

Following the process of "directed content analysis," outlined by Y. Zhang and Wildemuth (2009, p. 309), I developed a coding scheme based on my research questions, as well as prior theory and research on endowment spending and financial aid policies. In the process of directed content analysis, the researcher systematically immerses

themselves in large quantities of data (i.e., the 2008 and 2016 responses to Congress), exploring emerging themes and inductive findings through a constant comparison process (Y. Zhang & Wildemuth, 2009).

I began by thoroughly reading and reviewing all components of each institution's response to Congress in a particular response year (e.g., introductory letter, complete responses to all question, appendices). I used the nVivo software package to apply relevant a priori codes to chunks of data that connected to my research questions and topics of interest (see Appendix F for coding manual and categories). As new categories, topics, and themes emerged, I generated new inductive codes from the data. For example, after reading several responses, I observed that nearly every institution mentioned "intergenerational equity" as a goal of their endowment. Therefore, I added a parent code for this topic and re-checked any prior data relevant to the new code. I added numerous interpretive memos as unexpected or unique findings surfaced through my analysis. I constantly re-checked my coding to ensure that I was consistent in my application of codes.

Ultimately, my goal was to develop a comprehensive understanding of the changing relationship between endowments and financial aid at some of the country's wealthiest private institutions. As with all studies employing content analysis, this process necessitated a careful balance of making inferences, presenting my own interpretations of their meanings, and supplementing my findings with descriptive data (Y. Zhang & Wildemuth, 2009). After coding the 60 responses to Congress, I reviewed all codes, notes, and memos in order to identify broad themes, as well as notable exceptions, within my institutional sample. I also compared responses between individual

institutions and across time periods (2008 vs. 2016) to identify emerging trends and changing policies. In noting each emerging theme or finding relevant to each of my two research questions, I identified specific quotations, data points, or other references from universities' responses that provided additional support for my findings. Y. Zhang and Wildemuth (2009) emphasize this critical balance between description and interpretation throughout the process of content analysis, due to its fundamentally interpretive nature. Therefore, in order to substantiate each of my interpretations or themes, I provided detailed rationales for my findings, including rich description or specific quotations pulled directly from institutional responses to Congress. Finally, I supplemented my qualitative analysis and findings with descriptive or quantitative data from multiple sources, including IPEDS, the *NACUBO-Commonfund Study of Endowments,* and *US News and World Report*.

Limitations

I acknowledge several limitations with the use of content analysis, and more broadly, qualitative methods. The nature of any qualitative research is inherently interpretive and subjective, representing a "personal and theoretical understanding of the phenomenon under study" (Y. Zhang & Wildemuth, 2009, p. 313). Therefore, I made specific efforts to substantiate my interpretations and findings with specific descriptions, quotes, and caveats, given the unique context of each institution. This qualitative analysis was not intended to generalize across all institutions, or even all private institutions with large endowments, given the heterogeneity in institutional missions, degree offerings, and other characteristics. My findings were limited to the 30 institutions who made their

responses public via college websites, news sources, or the internet, or alternatively, responded to my email requests. Despite the standardization of Congressional letters in each year, college and university responses differed in degree of detail, length, and other characteristics. Finally, the questions posed by Congress were not identical in 2008 and 2016; while there is significant overlap in topic and theme, there are also notable differences in questions asked. Potential approaches to address these limitations are discussed in the final chapter in the "future research" section.

CHAPTER 5

FINDINGS

In this chapter, I begin by providing an overview of the broad structure, characteristics, and context of the institutional responses to Congress. Following this introduction, I turn to key themes and findings associated with my two research questions: endowment spending, priorities, and policies, and the endowment-financial aid relationship at private, nonprofit colleges and universities with at least $1 billion in endowment assets. My primary analysis focuses on the themes that emerged through systematic exploration of these responses to Congress, particularly the factors that may pose constraints on each institution's ability to spend more of their endowment assets, increase student aid and decrease costs, and ultimately, promote access for lower-income students.

Introducing the mechanism: Structure, characteristics, and context of institutional responses to Congress

Though the 2008 and 2016 requests from Congress differed in the specific wording of questions posed to schools, there was much overlap in the topics addressed in the two years, including endowment size and growth, spending and payout policies and restrictions, investment policies, and financial aid spending and policy. In both response years, the structure of the institutional responses to Congress were notably isomorphic across most colleges. For example, in both years, most responses began with an

introductory letter, ranging from one-half to six pages, typically signed by the college or university president. Decidedly, these introductory letters functioned as an opportunity for each school to present its own "story" or defense for institution-specific policies, couched within its unique mission, goals, and lens.

For example, Berea College (KY), a liberal arts college enrolling just over 1,600 students, begins its 2008 response by providing a compelling narrative of the college's founding, mission, and relationship to financial aid policies:

> Imagine a place in 1855 slave-holding Kentucky where black children and white children lived and learned together as equals. Imagine a place where "interspersion" of black and white homes, one alternating with the other, created a planned community that was inclusive of all. Imagine a small church open to all who would worship, black and white, and where the pastor preached a gospel of impartial love built upon the two Great Commandments (i.e., to love God and to love neighbor as self). This pastor was abolitionist John G. Fee and the new schools were called Berea after its Christian namesake in Greece . . . The Berea College Catalog of 1866 noted that our schools sought to serve the freed slaves and "poor white mountaineers" of the mid-south. In 1892, the College stopped charging tuition and required each student to work for the College. Berea College and schools emphasized learning, labor, and service as the foundation for educating the whole person. This is still our policy today. (p. 1)[2]

Similarly, in the "preamble" to its 2016 response, Washington and Lee, another small liberal arts college, invokes institutional history and longevity in its defense of endowment spending policies:

> The University takes seriously its responsibility for the management, oversight and establishment of payout from the endowment with the clear purpose of preserving the real purchasing power of the underlying funds over multiple generations and into perpetuity. *As an institution that is older than the United States of America*, it is our belief that we and our predecessors have developed over time strong policies and sophisticated

[2] Full response letters referenced in this study may be obtained, upon request, from the researcher (if made publicly available) or from sample institutions directly.

> strategies to meet this unique approach to sustainable business. (para. 4, emphasis added).

While the Congressional requests did not require any such introductory letter or specific format, these prologues typically followed a common structure: first, they acknowledged each college's eagerness to respond to the Congressmen's request; next, they introduced the colleges' unique missions and endowment priorities; and finally, they justified each school's endowment and financial aid spending and policies. For example, in 2008, Grinnell College's introductory letter begins:

> We are glad to be able to provide information about our endowment and how we invest and spend it and most importantly how we use it as the primary resource, larger in our revenues than tuition and fees, to support students of any background and all financial needs to come here and then to move on to do great things for the common good. (para. 1)

Other schools reiterated their institutional priorities and relationship to financial aid spending and polices. Tufts University's 2008 introduction reads:

> Tufts University is committed to attracting students from diverse backgrounds. All of our scholarship aid is awarded on the basis of demonstrated financial need, and we meet the full financial need of all admitted undergraduates. This year, Tufts will distribute an estimated $42 million in scholarship aid to undergraduates. (p. 1)

In many cases, introductory letters highlighted the many initiatives that schools had already implemented to keep education affordable for low-income students. For example, Amherst College's 2008 response bolstered that it was the first college in the country to replace loans with grants for low-income students and also announced the college's recent initiative to eliminate loans for all enrollees.

Finally, given the tenor both the 2008 and 2016 Congressional requests—questioning endowment spending, significant investment returns, tuition growth "far in excess of inflation" (2016 Congressional request), and applicability of "very generous tax

breaks" from the IRS (2008 Congressional request)—it is unsurprising that several colleges defended their endowment management and spending approaches quite defiantly in their introductions. For example, Baylor University's response avowed, "We are committed to maintaining an endowment that will help us achieve the goals of our mission and vision and withstand the tempests of the financial markets" (2008 response, p. 2). Similarly, Wake Forrest's 2016 response reiterated its institutional autonomy and self-determination, stating:

> Wake Forest was founded by private initiative, and ultimate decision-making authority lies in a privately appointed Board of Trustees rather than in a public body. Funded to a large extent from private sources of support, we are determined to chart our own course in the pursuit of our goals. (p. 2)

Following these introductory letters, each school provided responses to the specific questions posed by Congress. Each response was somewhat homogeneous in structure and format across schools in both years, but varied in length from 5.5 to 25.5 pages in 2008 and 5 to 31 pages in 2016. The length and detail of responses to individual questions varied greatly by institution and year; some schools provided very terse, pointed responses, only answering the questions that were directly asked, while others provided lengthy or multi-page responses providing an in-depth justification of a policy or response. Additionally, some schools included appendices in their response to Congress, whether supplementing replies to specific questions (e.g., costs of attendance, endowment spending, and financial aid spending), providing additional information on institutional policies (e.g., conflict of interest or investment spending policies), or presenting additional information about the college's mission and context.

To illustrate this variation, the University of Tulsa's total response totaled six pages in 2008 and five in 2016 (with no introductory letter made publicly available in either year). On the other hand, MIT's 2008 response contained a 1.5-page introductory letter and was 27 pages in total, while its introduction grew to five pages and total response declined to 26 pages in 2016. Emory University provided nine pages of appendices in its 2008 response, including charts and tables on costs of attendance, its loan replacement grant program, investment policy, and endowment spending policy and costs. In 2016, Tufts University included 205 pages of appendices, including annual financial reports, trustee bylaws, conflict of interest policies, real estate holdings, and information on underwater endowments.

In sum, while the structure and tenor of institutional responses to Congress were similar in both 2008 and 2016—presenting a defense of each college's spending and policies in its own words and context—there was still significant variation in the amount of information and level of detail provided in response to questions by each school. In the sections to follow, I present the primary themes that emerged from my analysis of institutional responses to Congress and in particular, my two research questions. I first focus on the multiple priorities and constraints of postsecondary endowment spending policy, then turn to the relationship between endowments, financial aid spending and policy, and student access at some of the wealthiest and oftentimes selective private institutions in the United States.

Intergenerational equity: Balancing the present and future

Given Hansmann's (1990) research, it is unsurprising that in both response years, multiple institutions highlighted the concepts of "intergenerational equity," "intergenerational stewardship," "intergenerational neutrality," or being "generation neutral" in guiding and stabilizing endowment spending and policies over time. Most schools introduced the idea of intergenerational equity early in their responses as an entrée into discussing challenges of endowment spending, including the need to protect and grow endowments for future generations, guard against the fluctuations of the economic markets, and ultimately, to stabilize spending rates.

Of the 15 sample schools explicitly mentioning these terms in their 2008 responses and 17 institutions in 2016, most invoked intergenerational equity ("IGE") as a mission of the endowment or a rationale for limiting spending and stabilizing payouts. Many mentioned IGE in the context of preserving the purchasing power of the endowment or balancing the need of current and future students, such as Dartmouth College, which wrote in its 2016 response, "The purpose of our endowment is to provide maximum sustainable financial support for Dartmouth's mission, in perpetuity. This requires balancing the interests of current and future generations of Dartmouth students and faculty, a concept known as intergenerational equity" (p. 4). Others addressed the role of IGE in indirect ways, including the University of Tulsa, which wrote, "The intent of the [endowment] policies is to balance current revenue while ensuring equitable payouts for future generations of students in perpetuity" (2008 response, p. 3).

Swarthmore College mentioned IGE as a justification for endowment spending policies, but also wrote of its role in protecting reputational capital:

> The objective of the endowment spending guideline is to maintain intergenerational equity while securing financial sustainability and

> providing for the future development of the College. This means on the one hand, spending an amount sufficient to preserve Swarthmore's preeminent standing among liberal arts colleges and to provide current generations with financial access to an outstanding education; and, on the other hand, re-investing enough to enhance the purchasing power of Swarthmore so that the College may continue to strengthen and develop for the benefit of future generations. (2016 response, p. 6)

No colleges mentioned anticipating declines in donor giving, decreases in student enrollment demands, or potential long-term investment stagnancy in their responses to Congress. Long-term investment growth has far surpassed annual inflation and nearly all schools have recovered from Recession-era losses. One notable exception came in MIT's 2008 (pre-Recession) response to Congress, where it predicted significant increases in costs of purchasing and maintaining science and engineering equipment, necessary to pursuing the school's educational mission:

> MIT's operating costs have been rising at a significantly higher rate than the consumer price index because of the escalating cost of high quality advanced science and engineering equipment, facilities, research, and related education. High fixed costs rising at these rates dictate an endowment spending policy that protects long term purchasing power in its pursuit of intergenerational neutrality. Given high and escalating fixed costs and endowment investment return volatility, a fixed, inflexible endowment spending rate would be inappropriate and could harm both the current and long-term fulfillment of MIT's mission. (p. 15)

Such responses are consistent with Hansmann's (1990) criticisms of IGE arguments, as mentions of IGE in institutional responses did not provide justification for endowment growth and spending restrictions. While the institutions in this study were consistent in invoking IGE as a rationale for endowment-building and spending policies, they failed to show (or even to suggest) that donations and investment growth were likely to fade in the future. Thus, Hansmann (1990) would likely criticize these intergenerational equity-based arguments for endowment growth "a singularly weak justification" (p. 18-19).

The differential—and potentially competing—priorities of college and university endowments

In both 2008 and 2016, institutional responses consistently reiterated the multiple, potentially competing priorities that today's postsecondary institutions face when apportioning their endowment resources and payouts. Contrary to many of the criticisms of the media and Congress, colleges and universities in the sample were quick to emphasize the endowment's central role in supporting all facets of campus life. Addressing one of the frequent criticisms of large endowments, Princeton University defended its role in supporting the institution's multiple missions:

> Contrary to what some have suggested, the endowment does not function as a "piggy bank" or "rainy day fund" waiting to be used or allocated; the earnings from the endowment are being used each year to support all areas of the University, from teaching, research, and student aid to the physical plant, libraries, an art museum, and many other purposes. (2008 response, p. 18)

Indeed, while both the 2008 and 2016 Congressional requests explicitly asked questions about the endowment's relationship to financial aid, colleges disclosed multiple, mission-driven priorities that both required institutional attention and required large amounts of endowment resources. In effect, many schools challenged Congress' tacit notion that financial aid should—or perhaps even *could*—be their endowment's central priority.

Unsurprisingly, several top categories of endowment expenditures were repeated across multiple schools; however, undergraduate financial aid or student scholarships was listed among the top 10 major endowment expenditures by every institution in response to Congress' questioning in 2008 (and in most cases, ranked in the top five endowment spending categories). In addition to student financial aid and scholarships (both graduate and undergraduate), schools mentioned faculty salaries and professorships, staff salaries,

academic and instructional support, institutional support; technology, campus libraries, laboratories, maintenance of campus facilities, research support, general operations, and lectureships as categories topping endowment spending in 2008. Other expenditures mentioned less frequently included campus museums, campus chapels, support for specific colleges or schools (e.g., College of Engineering, College of Business), student and teaching awards and prizes, student loans, medical education, and athletics.

Several colleges noted the endowment's role as a necessary resource to meet competitive marketplace demands**,** including enabling smaller classes for students, maintaining university prestige and rankings, and supporting global competitiveness. In both its 2008 and 2016 responses, Tufts University discussed the endowment's role in meeting the demands of prospective and current students and their families, as well as the need to compete for high-quality faculty in its 2008 response, writing:

> Current students, prospective students, and their families increasingly demand smaller classes taught by full-time faculty, enhanced student services, and more robust residential life and facilities. Moreover, we cannot measure faculty productivity solely in terms of classroom teaching, since faculty excellence requires opportunities for research and continuing intellectual renewal. All universities face substantial market pressures on faculty salaries, especially in those fields where faculty have more lucrative career options in industry, such as business, economics, computer and information sciences, and engineering. (p. 2)

Similarly, Rice's President, David Leebron, argued that while other countries were making significant investments in higher education, endowments remained a critical contributor to international competitiveness, "substituting in many respects for general governmental financial support that would otherwise be required" (2016 response, p. 2).

Institutional mission and type decidedly impacted how institutions depicted the many priorities of college endowments. Predictably, MIT, a large research institution, highlighted the increasing costs of research infrastructure in its 2008 response:

> Today's research requires more than simply textbooks and periodic tables; biology requires high-throughput screening equipment, electrical engineering and computer science require cutting-edge microtechnology laboratories, and physics requires ever faster computational technology. Research once performed by a single investigator in her lab is increasingly done by teams of cross-disciplinary scholars working together to solve the world's most complex challenges. Similarly, the way we teach science and engineering has changed. MIT has invested in state-of-the-art laboratories, small classes with hands-on learning, early research experiences for undergraduates, and increased mentoring and individualized instruction. (p. 1)

On the other hand, smaller, liberal arts colleges discussed very different pressures on endowment assets. In 2016, Swarthmore College cited endowment stewardship as central to facing the "challenges facing liberal arts education" (introductory letter, para. 11) and Williams College reiterated the endowment's role in enhancing the quality of its liberal arts education and "mak[ing] it accessible to students of all backgrounds" (p. 1). Similarly, religiously affiliated institutions, such as Baylor University, and Notre Dame, discussed their endowments' role in supporting financial aid, teaching, research, and institutional leadership while remaining grounded in their Christian and Catholic missions, respectively.

While the differentiation in institutional priorities is not surprising, given the wide variation in enrollments, missions, and other characteristics, it is important to consider how such factors can shape endowment spending. For example, many of the liberal arts colleges in the study sample do not enroll graduate students, but those that do are more likely to apportion some endowment funds to graduate financial aid and research support.

Princeton, in its 2008 response, highlighted "the enormous costs [and] the substantial resources required to support world-class programs of graduate education and research" which "contributes to the public good" (p. 2). On the other hand, Berea College, which provides full-tuition scholarships to all students as part of its mission to educate students from the "lowest economic tier" (2016 response, p. 3) identifies direct student support (tuition scholarships, room and board scholarships, student laptop program, and study abroad) as its top four categories of endowment expenditures, followed by debt service for academic buildings, in its 2008 response. Consequently, Berea directed 68% of its endowment spending to student tuition and financial aid in 2014-15. The University of Richmond, also a liberal arts college, counted scholarships as its top endowment expense, followed by professorships and faculty salaries, athletics (and related scholarship aid), academic and faculty support for the Jepson School of Leadership studies, and faculty and academic support for the Robins School of Business.

In addition to mission-driven and academic endowment priorities (and aligning with my conceptual framework), multiple colleges noted multiple external stressors necessitating endowment support, including rising health care expenses, costs of supporting federal research funding, and the growing burden of regulatory requirements. For example, Emory University highlighted the expense of maintaining educational quality (salaries, financial aid, libraries, and technology) in its 2008 response, but also turned the proverbial table on Congress, mentioning the rising expenditures of maintaining infrastructure and complying with federal regulations:

> Federal regulation of higher education also drives costs. Just a sampling includes the Family Educational Rights and Privacy Act, Federal Immigration Laws, Title IV, Title IX, Drug-Free Schools and Campuses, Campus Security Act, Campus Voter Registration Act, and ADA. In

> addition, the array of compliance costs for federally funded research is not fully recovered through Indirect Cost Recovery due to caps and must be subsidized by other revenue streams. (p. 5)

Relatedly, Tufts University discussed the rising costs of supplementing federal research grants with funding in both 2008 and 2016, writing in 2016:

> And we must manage the challenges of declines in the real value of federal research support and increased costs of compliance with regulatory requirements that adversely impact our budgets. Higher education also faces the same economic pressures felt in other industries such as the rising cost of health care. (p. 3)

While these external costs may be expected at larger research institutions, even smaller colleges, such as Washington and Lee (a liberal arts institution) acknowledged such pressures, noting "the increased burden of the regulatory and reporting environments that are either directly or indirectly imposed on higher education" (2008 response, p. 4).

Finally, numerous schools cited the endowment's critical role in subsidizing the costs of educating undergraduate students. Detailing both the direct and indirect costs contributing to providing an education, from libraries to laboratories to faculty scholars, Harvard's 2016 response aptly stated, "A cost that is borne by the endowment is one that does not have to be paid with tuition dollars" (pp. 2-3). Similarly, numerous schools, ranging from MIT to Swarthmore to Princeton to Washington and Lee and Williams, discussed how their endowments support and subsidize the education of all students—including those paying full tuition. In noting that the relationship between endowment and costs, both Williams College (2008) and Washington and Lee (2016) suggested that tuition and fee revenues would need to double to cover the colleges' operating budgets. "Without endowment or gift income we would have to double our fee revenue, or substantially reduce the quantity or quality of our offerings to students," wrote Williams

(2008 response, p. 2). Institutions with larger endowments were not exempt from this dependence, as MIT noted in its 2008 response:

> The true cost of providing an MIT education to our students – 85% of whom study science or engineering – significantly exceeds the tuition revenue we receive. MIT's endowment is used to subsidize the cost of providing this education and to award need-based scholarships, further reducing the price paid by students and families . . . As described in Question 2, between 1998 – 2007, net tuition decreased almost 15% adjusting for inflation as MIT more than doubled the assistance it provided to undergraduates. This level of affordability, at a time of escalating costs for providing a quality science education, is made possible by the growth in MIT's endowment. (p. 17)

Therefore, while endowments may be growing, colleges and universities in this study consistently emphasized that institutional commitments and priorities were increasing in tandem. Whether socially imposed costs such as external regulations, competitive marketplace demands of students and families, or unique challenges relevant to institutional mission, type, or size, nearly every college argued that endowments are being stretched to capacity. Every school made the case that endowments were central in supporting all facets of campus life, and each college—directly or indirectly—challenged Congress' insinuation that it was not placing sufficient emphasis on student financial aid.

Endowment spending: Policies, proportions, and payouts

The topic of endowment spending—both institution-specific policies and proportions and amounts dedicated to specific priorities—was of particular interest in both the 2008 and 2016 Congressional inquiries. To recall, private foundations and charities are required by the IRS to spend a minimum of five percent of endowment value each year; however, colleges and universities are exempt from such regulations. In both response years, Congress inquired about four specific areas of each school's endowment

spending and related policies: payout and investment policies, targeted versus actual payout percentage, amount of endowment spent in recent years, and restrictions or limitations on endowment spending. Given the multiple missions and priorities discussed in the previous section, as well as the broad range of endowment resources within this diverse group of schools (ranging from just over $1 billion to over $36 billion), it is not surprising that responses varied greatly across sample schools.

The Congressional letters focus specifically on policies regarding annual spending rates and amounts, including targeted payouts "year-by-year for the past ten years" (see Appendix A, question 10) and percentage of endowments' beginning balances spent each year (see Appendix B, question 6). However, my analysis of institutional responses revealed that endowment spending rates and policies are decidedly based on a more long-term and multi-faceted approach, typically of no less than 12-quarter (3-year) rolling averages of endowment values. For example, in both 2008 and 2016, Lehigh University's targeted endowment payout was five percent of the endowment's value over a three-year moving average, including a minimum zero percent increase and maximum 10% increase on the previous year's endowment payout. The majority of sample institutions, including Duke, Berea, Brown, Emory, Grinnell, and many others, cited similar 12-quarter or three-year time frames as the basis for endowment payouts and policies. Schools rationalized these longer-term approaches as a means of ensuring stability in endowment spending over multiple years, such that programs and initiatives funded by endowments would not be affected as greatly by year-to-year fluctuations in economic conditions or investment returns. As such, MIT wrote, "Tying distribution rates to short-term market fluctuations would result in unstable distributions forcing significant programmatic disruptions and

causing major harm to the quality of students' educational experiences and our contributions to knowledge and advancement through research" (2016 response, p. 9). Other institutions incorporated even longer-term time frames in determining endowment spending targets, such as Baylor University (48 months) and the University of Rochester (five years).

As a consequence, while most institutions' *target* payout percentages hovered around five percent (the minimum required of other nonprofits and foundations), *actual* endowment payouts were often much lower when calculated based on one-year metrics (as requested by Congress). Prior research (Sherlock et al., 2015) had suggested that endowments of more than $1 billion (including public schools) averaged a 4.6% spending rate in FY 2014, with only 26% of schools paying out more than 5% in that year. Similarly, another study found that about two-thirds of private institutions with endowments over $500 million spent less than 5% of their endowment value in 2012 and one-half spent less than five percent in 2013 (Nichols and Santos, 2016). Within the present study's sample of 30 wealthy private institutions, even fewer reported spending five percent or more when measuring endowment payouts as a proportion of the fiscal year's beginning market value: 21% of colleges in 2006-07 (6 of 28 schools) and 20% in 2014-15 (6 of 30 schools; see Table 9). Mean endowment spending was 4.40% in 2006-07 and 4.48% in 2014-15, while the median was slightly higher in 2014-15, at 4.53% (vs. 4.33% in 2006-07).

Moreover, in both years, the same proportion of schools (21% and 20% of each year's sample, respectively) reported spending less than four percent of their endowment's beginning market value, with Boston University spending only 2.53% in

Table 9

Total Endowment Spending and One-Year Endowment Payout Rates, 30 Private Nonprofit Colleges and Universities Included in Qualitative Sample, 2006-07 and 2014-15

Institution	Annual Endowment Spending/Payout (in millions)		One-Year Endowment Payout Rate (Institution-Reported)	
	2006-07	2014-15	2006-07	2014-15
Amherst College	$52.83	$83.46	4.00%	3.88%
Baylor University	$48.38	$60.74	5.56%	5.30%
Berea College	$42.37	$49.81	4.47%	4.80%
Boston University	$28.77	$51.43	2.53%	3.10%
Brown University	$95.00	$143.03	4.40%	4.80%
Columbia University	$287.00	$524.10	5.20%	5.70%
Dartmouth College	$165.61	$214.20	5.40%	4.80%
Duke University	$149.39	$307.00	3.90%	4.90%
Emory University	$235.34	$212.90	4.18%	4.30%
George Washington University	$45.68	$73.67	4.30%	4.70%
Grinnell College	$50.80	$59.24	3.45%*	3.20%
Harvard University	$1,309.00	$1,787.00	4.60%	5.10%
Lehigh University	$43.49	$61.90	4.60%	5.10%
Massachusetts Institute of Technology	$359.90	$545.90	4.30%	4.50%
New York University	$77.18	$125.22	4.20%	3.60%
Princeton University	$464.18	$871.00	4.01%	4.20%
Rice University	$181.80	$249.00	4.56%*	4.52%
Smith College	$49.40	$77.44	4.30%	4.40%
Stanford University	$609.00	$1,058.03	4.30%	4.90%
Swarthmore College	$54.35	$63.53	4.36%	3.40%
Tufts University	$48.20	$73.42	5.00%	5.10%
University of Notre Dame	$159.90	$308.91	3.56%	3.80%
University of Richmond	$52.86	$101.37	3.80%	4.40%
University of Rochester	$77.34	$89.61	5.80%	4.80%
University of Tulsa	**	$48.09	**	4.70%
Wake Forest University	$40.40	57.4*	4.40%	5.00%
Washington and Lee University	$28.94	$56.37	4.90%	4.38%
Wellesley College	$74.50	$82.56	5.30%	4.50%
Williams College	**	$92.53	**	4.10%
Yale University	$684.00	$1,082.00	3.80%	4.53%
Minimum	$28.77	$48.09	2.53%	3.10%
Maximum	$1,309.00	$1,787.00	5.80%	5.70%
Mean	$196.99	$287.03	4.40%	4.48%
Median	$75.84	$91.07	4.33%	4.53%

Notes: One-year payout rate and total endowment payout are based on institutional responses to Congress in 2008 and 2016. If no one-year rate was provided, rates were calcuated based on institutionally-reported endowment spending as a proportion of FY beginning market value provided in institutional response to Congress (author-calculated responses indicated by asterisk [*]). Double asterisk (**) indicates missing endowment data. *Data sources: 2008 NACUBO Endowment Study, 2016 NACUBO-Commonfund Study of Endowments,* and 2008 and 2016 responses to Congress.

2006-07 (targeted payout was 4.0%) and 3.1% in 2014-15 and Grinnell College only 3.2% in 2014-15. However, colleges consistently defended their spending amounts and proportions, arguing that longer-term spending policies and rates were more suitable to ensure fiscal stability. As an example, Rice University wrote the following of its policy in 2016 (which was guided by a three-year moving average of endowment market value):

> If Rice had a spending policy that called for spending a pre-specified percentage of the endowment market value at the beginning of the year, this would force the University to decrease suddenly and sometimes precipitously endowment spending and reduce operating expenses and programs in years following periods of negative or low returns. Under such a policy, Rice would have been forced to decrease endowment spending in at least three of the last ten years, including substantial reductions in fiscal years 2010 and 2011 as compared to spending levels in 2009. (p. 8)

Notably—and despite the Recession's impact on investment values—all but one institution reported increasing their endowment payout amounts from 2006-07 to 2014-15 (see Table 9). The University of Richmond reported nearly doubling its endowment payout, from $52.86 million to $101.37 million. Similarly, Yale University increased its endowment distribution over eight years from $684 million to over $1 billion by 2014-15. Harvard University, the wealthiest institution in the country, spent $1.8 billion from its endowment in 2014-15, an increase of $500 million since 2006-07. Other schools, including Swarthmore College and Wellesley College, reported more modest growth in endowment payouts over this time period ($9 million and $8 million, respectively).

It is also critical to consider how "endowment spending" is liberally and disparately defined by individual institutions, policymakers, and Congress. What is—or should be—considered or included in endowment payout amounts and proportions? Over the course of my research, I discovered a common, though not systemic practice of

including endowment management costs in calculations of endowment spending. While not *technically* reporting endowment payouts incorrectly, many schools incorporated endowment management costs when reporting one-year payout proportions to Congress. For example, Lehigh University reported two different one-year payout percentages in response to the 2016 Congressional request—5.1% and 5.7%. The 0.6 percentage point differential is accounted for when including $7.085 million in endowment operating costs, reported in the school's response to question eight, inquiring about percentage of the endowment's beginning balance that was spent. Similarly, Duke reported one-year endowment spending as 4.9%, but reported $307 million in "endowment spending" for the same year, representing only 4.4% of the university's $7.03 billion endowment at the end of the prior fiscal year. The difference between these two proportions—a calculated 4.4% and the published 4.9%—is accounted for when $38 million in endowment reported management costs are included. While not clearly delineated in every school's response, many other institutions echoed this practice. In 2014-15, MIT reported an endowment distribution of $545.9 million, but included $18.18 million in endowment management expenses in this figure. Similarly, Boston University included $4.27 million in "reinvested endowment distribution" (2016 response, p. 12) in one calculation of endowment spending. On the other hand, Columbia University explicitly excluded such management expenses from its reported payout amounts and proportions, writing, "Actual distribution rate and amount spent exclude costs to administer the endowment" (2016 response, p. 8). Thus, while Congress did not explicitly define what is permitted for inclusion in endowment spending, payout, or distribution amounts, institutions often included large costs of managing the endowment, often making endowment payout

proportions appear much larger than was spent on mission-driven programs and priorities.

Finally, in spite of growth in endowment payouts from 2006-07 to 2014-15, and indeed—over the past twenty years—reported one-year endowment payout proportions did not typically approach the large investment returns experienced by many schools. In their responses to Congress, nearly every sample institution reported double-digit percentage investment returns from fiscal years 2004 through 2007. Brown University's endowment grew by $1 billion from 2004 to 2007, increasing by 12.7%, 11.6%, 17.8%, and 21.6% in each of the four years leading up to the Great Recession. However, the College's payouts did not approach these gains over the same four years, averaging 4.7% (one-year average) and 5.2% (12-quarter moving average) of total endowment market value. The University of Rochester's endowment grew by 15.8% (over $235 million) from fiscal year 2006 to 2007, but its endowment payout was only 5.8% of beginning market value, or $77.4 million, in 2006-07. Similarly, Tufts University's endowment earned $114.3 million and $271.2 million in investment returns in 2005-06 and 2006-07, but only paid out $41.7 million and $48.2 million in those years, respectively. While many institutions would likely argue that the Great Recession's impact justifies this relative modesty in spending, this finding offers one explanation for the massive expansion of endowment values over time. Even after accounting for inflation and the Recession's impact, endowment spending has not nearly approached average annual growth in total endowment values—the argument at the crux of Congress' lingering critiques.

Assessing endowment size, scope, and capacity: Arguments for different metrics

In defending their endowment spending policies and practices, a few schools in my sample argued for a different metric of measuring endowment capacity, which would doubtlessly reshape rankings of institutional resources: endowment per full-time equivalent student. These institutions maintained that it was unfair, if not incorrect, to measure endowment capacity and scope by total endowment value alone. More specifically, institutions including New York University, Boston University, and George Washington University maintained that given their larger student enrollments (or full-time equivalent enrollments), they were subject to undue scrutiny of spending and policies.

In its 2008 response to Congress, George Washington University argued that its endowment management policy was guided not only by total size and growth of assets, but also by the size of its student body. Similarly, in both years, NYU addressed what it termed "The Per Capita Factor: Endowment Per Full-Time Equivalent (FTE) Student" (2008 and 2016 responses, p. 2), equating it to a common measure of personal financial resources:

> Just as the economic well-being of a nation is often best understood through the lens of per capita income, so, too, should universities' endowments be evaluated in this manner. It is the only meaningful way to measure the ability of an institution to use endowment funds for aid purposes. Ranking institutions by the aggregated value of the endowment dollar levels without regard to the number of students being served (FTEs) does not provide a meaningful picture of the financial flexibility—or inflexibility—of a university's ability to offer aid to low and middle income students. (2016 response, p. 2)

Recall from Table 6 that of the 30 private institutions in my sample, FTE undergraduate enrollments ranged from less than 1,600 to just over 27,000 undergraduates in 2014-15.

More specifically, NYU, is the largest private, nonprofit university in the country, and Boston University, with over 21,000 undergraduates, is not far behind. As such, NYU argued that if the Congressional committees had instead requested responses from the 56 private institutions with the largest endowments *per FTE*, it would not have been on the list.

Returning to Table 4, which ranked the 53 private colleges with undergraduates subject to the 2016 Congressional request by 2014-15 endowment per FTE values. As suggested in its 2016 response, NYU—ranked 19th by total endowment—drops 30 positions, to 49th, when measured by endowment per FTE. Among the 30 schools in this study's qualitative study's sample, Boston University, George Washington, and the University of Rochester experienced decreases of more than 10 positions when re-ranked by endowment per FTE enrollment. Conversely, sample schools with smaller undergraduate enrollments, including Swarthmore, Amherst, Grinnell, Washington and Lee, Berea, and the University of Tulsa leapfrog more than 10 positions upward when endowments resources are re-ranked. Amherst College was quick to acknowledge its robust resources relative to institutional size (over $1.1 million per student) in its 2016 response, but defended its endowment and spending practices, self-described as "the most robust set of financial aid policies and practices of any liberal arts college, and among the most generous of any college or university in the nation" and as "perhaps the most endowment-reliant institution of higher education" (p. 12). As suggested by both NYU and GWU in their responses to Congress, this finding calls to question whether Congress would be justified in levying the same tax policies or penalties upon schools with large endowments yet larger FTE enrollments—particularly if their intent is to dissuade

institutions from increasing costs—or whether it would unfairly penalize schools attempting to do more with seemingly endowment fewer resources per enrolled student.

Limitations of endowment and spending capacity

The introductory letters to both the 2008 and 2016 Congressional requests insinuated that colleges *should* be spending a greater proportion of their endowment assets; however, most replied that their endowments' spending capabilities were severely limited. Spending restrictions on endowment assets—whether board- or donor-imposed—were a fundamental financial constraint cited by nearly every sample institution, ostensibly limiting their abilities to spend at higher rates and to dedicate greater funds to specific purposes (i.e., financial aid and college costs). NYU reiterated this theme in its 2016 response—echoed by multiple schools—writing:

> A common misconception is that an endowment is a checking account that can be used by a university however and whenever it chooses. In fact, major university endowments are not a single fund; they are actually a collection of numerous—sometimes thousands—of individual funds, oftentimes donated for a specific purpose. (p. 1)

The sheer range in number of funds comprising each school's endowment was telling, considering that each individual endowment fund is susceptible to specific donor or board restrictions. Emory University reported approximately 1,400 separately endowed funds as of 2008, Princeton more than 3,500, Notre Dame more than 4,500, and Stanford over 6,200 individually endowed funds, spread across 320 different university units. There was no consistency in the number of funds across institutions, with small Wellesley College's 3,133 individual funds nearing NYU's nearly 3,500 in 2016, but Harvard's 13,000 funds far eclipsing all schools. The number of separate funds in schools'

endowments grew from 2008 to 2016, such as MIT's endowment, which increased from 2,898 to 3,800 separate accounts (or about 31%) over just eight years. While not typical, some of these funds are given to support a broad range of purposes at individual schools (e.g., 288 funds supporting Rochester's Eastman School of Music). However, most of these separate endowment funds are typically not exchangeable across departments or schools, due to donor restrictions. Harvard stressed this in its 2016 response, writing, "In other words, an endowment given for the unrestricted support of the Harvard Kennedy School cannot be used to support financial aid at Harvard College" (p. 3) and "a gift dedicated to the Harvard Medical School could not be used to fund activities at the Harvard Business School or at the Harvard Law School" (p. 6).

Both Congressional letters specifically queried institutions about the amount and types of restrictions imposed on endowments by donors. Sherlock's (2015) research suggested that up to 90% of new donations to endowments were restricted by donors. However, it was surprising to note that even if only a moderate proportion of endowment spending was restricted by donors, a majority—if not all—of the corpus was often limited to a large degree by the board of trustees or administration, either as "board designated quasi-endowment," "internally restricted," "subject to purpose limitations," or similar terminology. Columbia University provides an apt example in its 2008 response, writing, "Across the entire endowment including true and quasi-endowments, 77% is subject to donor-imposed spending limitations for specific purposes. The 23% that is not subject to donor-imposed spending limitations is subject to purpose limitations as designated by the University" (p. 9). In that same year, Boston University reported that 83.18% of its endowment was subject to donor limitations or spending restrictions, while the remaining

16.82% was subject to "internally imposed restrictions on use" (p. 14). Thus, while not *explicitly* labeled by the University's board as restricted endowment, the remainder of the university's endowment assets is effectively functioning as such, presumably earmarked for numerous programs, initiatives, and functions dependent on its use. While only 41.8% of the University of Rochester's endowment was restricted by donors in 2008, it reported that the remaining 58.2% was subject to significant board limitations. In its 2016 response, Rice University claimed that none of its endowment was unrestricted; any funds not specifically restricted by a donor would be "designated by the board for specific operating purposes" (p. 3).

My research revealed some evidence that restrictions on endowments may be increasing over time, perhaps as donors increasingly give toward targeted purposes or institutions seek to establish more stable, long-term sources of funding for specific programs or initiatives. Emory University reported an increase in permanent or temporary restrictions on endowment from 54.4% in fiscal year 2008 to 70.5% in the 2015 fiscal year. Over 93% of the University of Tulsa's endowment was permanently or temporarily restricted by donors in 2014-15, up from 82% in 2008. Very few schools suggested that endowment restrictions had declined during this period; most had remained stable or increased. Thus, while endowment assets may be growing over time—even after significant Recession-era investment losses—my findings support Sherlock et al.'s (2015) work, suggesting that a growing proportion of new contributions come with strings attached or dedicated to donor-specific purposes.

The top areas of endowment restrictions (by proportion) were fairly standardized across institutions, though the specific categorization, proportions of restrictions, and

ordering doubtlessly differed by school. Scholarships/financial aid, faculty support and professorships, research academic department support, student services, libraries, and facility maintenance were frequently in the top categories of endowment restrictions, as well as broader categories including "multi-purpose," "general support," and "other." However, institutional type and enrollment size often shaped each school's specific endowment restrictions and categorizations of such. For example, Grinnell College, a small liberal arts college, listed "instruction," "scholarships, grants and loans," "general purposes," "student services," and "academic support" as its top five categories of endowment restrictions in 2014-15. Swarthmore College, another liberal arts college, listed similarly broad categories in its top five restrictions in 2014-15, including "academic support," "financial aid," "institutional," "public support," and "student support." On the other hand, larger institutions, especially those enrolling graduate students, tended to include research support among their top five endowment restrictions, in addition to broader categories such as faculty support, student financial aid, and academic/instructional support. Stanford University listed "instruction and research" as its top endowment restriction in 2014-15, followed by "student aid," supporting both undergraduate and graduate students. Harvard's leading endowment restrictions, while still relatively broad categories, included "professorships and faculty salaries," "financial aid," "teaching and research programs," "program initiatives," and "libraries and museums."

In both response years, *every* sample school responding directly to Congress' prompts on the topic listed student financial aid and/or undergraduate scholarships in their top five categories of restricted endowment in both 2008 and 2016 (several schools

spoke in more general terms and did not list or rank their endowment spending categories). Moreover, in no cases where institutions explicitly ranked their categories of institutional endowment (i.e., from one to five) did financial aid/scholarship's rank decrease among other spending/restriction categories from 2008 to 2016, typically remaining in the top three categories of restricted endowment. At 13 sample institutions in 2016, financial aid or scholarships was listed as the top category of restricted endowment, with all others ranking it in their top three categories of restricted endowment.

This finding is especially salient, given Congress' focus on tuition, financial aid, and student costs. Even though large proportions of these endowments are reportedly constrained by donor and board restrictions, significant percentages of restricted endowments are still directed toward undergraduate and graduate student aid. Additionally, some institutions rationalized that by endowing other programs or areas of support on campus, they were freeing up general operating revenues and tuition to fund other priorities. For example, Emory University described a "ripple effect" (2008 response, p. 6) as endowments restricted to faculty salaries and academic program support enables unrestricted budget and endowment resources to be directed toward financial aid. The University of Rochester reported that 18.5% (or $15.3 million) of its endowment payout in 2014-15 was directed toward endowed professorships (and 17.4% of payout for student aid). However, the university justified its endowment's support of professorships, stating, "Endowed professorships alleviate support of faculty from current unrestricted funds. This frees up funds for student financial aid" (2016 response, p. 10). Subsequently, Rochester then combined the endowment payouts of both professorships

and student aid ($29.72 million in total), insinuating that endowment spending on professorships was, in essence, providing an equivalent amount of unrestricted funding for student aid. While a decidedly unique substitution and position to make, Rochester's response does suggest that while endowment funds may be earmarked as "restricted," there indeed may be more fungibility between restricted and unrestricted endowment and general operating budget than some campus leaders may be willing to admit.

As a final and unique finding regarding endowment restrictions and use, Notre Dame mentioned athletics as a source of unrestricted endowment income in its 2008 response, suggesting that the football team's success and revenues provided significant contributions for financial aid endowments. "In some cases, such funds are established with budget surpluses or unrestricted revenues from other sources," it wrote (p. 20). "For example, a significant portion of net revenues from the football team's bowl game appearances in recent years has been utilized to augment endowments for undergraduate scholarships and graduate fellowships." While an outlier among the sample in its mention of the role of athletic revenue, Notre Dame's statement again suggests some degree of exchangeability in terms of institutional assets and revenue sources, as well as institutional discretion and forethought in terms of how unrestricted endowment is funded, prioritized, and distributed.

Equipped with a more comprehensive understanding of endowment spending, including priorities and constraints, policies and payouts (amounts and proportions), arguments for different metrics of assessing endowment capacity, and spending limitations and donor- and institution-imposed restrictions, I now turn more explicitly to

my second research question, exploring the relationship between endowment spending and financial aid.

Stated commitments versus reality: Low-income student enrollments

My second research question focuses explicitly on university endowments and their relationship with institutional financial aid policy, spending on financial aid, and ultimately, access for lower-resourced students. A commitment to this final component—traditionally underrepresented groups, particularly low-income student and students of color—was vocalized in nearly every university's response to Congress (though more so in the 2008 responses, which focused more directly on financial aid). Responses were replete with evidence and examples of grants and scholarships, relationships with community-based organizations, and programs designed specifically to recruit and support first-generation, low-income, and minority students. Nearly all schools provided statistics exhibiting how they had improved financial aid packages or improved enrollment of Pell-eligible students in recent years, as well as a continued commitment to improving student access and aid. In this section, I provide a brief introduction to institutional responses regarding these topics, supplemented with IPEDS data on Pell Grant enrollment (frequently considered a proxy for low-income enrollment) at all 53 schools subject to the Congressional requests. Following this brief introduction, I continue my analysis of the 30 responses in my sample, focusing on the themes that emerged as I explored financial aid policy, spending, and student access at private colleges with more than $1 billion in endowment assets.

Reflective of Bowen's (1980) discussion of the persistent socially imposed costs or pressures affecting higher education, the tone and rhetoric of nearly all universities' replies reflected a shared concern with Congress regarding improvements to aid and access, as well as evidence of each institution's progress in these areas. Brown University wrote of "shar[ing] your interest in ensuring broad access to affordable education for students from all income levels who have the drive and desire to pursue postsecondary education" (2008 response, p. 1), while Columbia wrote of being the most socioeconomically diverse Ivy League school, "despite a significantly smaller endowment than some of our peer institutions" (2008 response, p. 1), though still possessing the seventh largest endowment of all public and private institutions in the country in that year. These stated concerns and commitments did not waver across the sample, whether considering Washington and Lee, University (4% Pell enrollment in 2008-09), which wrote of being "mindful that the costs of higher education are formidable for many families" (2008 response, p. 1) or Berea College (81% Pell enrollment in 2008-09), writing, "Obviously, as our mission directs, we at Berea College are eager to find ways to make high quality higher education in America affordable to all students" (2008 response, p. 3).

However, an examination of the proportion of undergraduates receiving Pell Grants at the 53 institutions subject to both Congressional requests presents a slightly different narrative, particularly in contrast to the 35% of students nationally that benefit from Pell (The College Board, 2015b). From 2008-09 (the earliest year Pell statistics were available for total undergraduate enrollment in IPEDS) to 2014-15, Pell enrollments increased by four percentage points, on average, but Pell enrollment averaged only 17%

Table 10
Percent Undergraduate Pell Grant Enrollments at Private Colleges and Universities with Endowments >$1 Billion, 2008-09 and 2014-15, Sorted by 2014-15 Values

Institution Name	Percent of Undergraduates Receiving Pell Grants		Change in Percent Pell Enrollment (+/-) 2008-09 to 2014-15
	2008-09	2014-15	
Berea College	81	83	2
Syracuse University	21	25	4
Amherst College	17	23	6
University of Southern California	16	23	7
Columbia University	15	22	7
New York University	15	22	7
Grinnell College	13	22	9
Smith College	23	21	-2
Baylor University	18	20	2
Emory University	14	20	6
Pomona College	11	20	9
Wellesley College	14	19	5
Case Western Reserve University	18	18	0
University of Rochester	16	18	2
Williams College	16	18	2
Massachusetts Institute of Technology	15	18	3
University of Richmond	11	18	7
Yeshiva University	11	17	6
Trinity University	9	17	8
Stanford University	13	16	3
Brown University	12	16	4
Cornell University	13	15	2
Tulane University	13	15	2
Southern Methodist University	12	15	3
Rice University	11	15	4
Lehigh University	10	15	5
Princeton University	10	15	5
Swarthmore College	10	15	5
George Washington University	9	15	6
University of Tulsa	15	14	-1
Bowdoin College	13	14	1
Dartmouth College	13	14	1
Vanderbilt University	11	14	3

Table 10 Continued

Institution Name	Percent of Undergraduates Receiving Pell Grants		Change in Percent Pell Enrollment (+/-) 2008-09 to 2014-15
	2008-09	2014-15	
Duke University	9	14	5
Northwestern University	9	14	5
University of Pennsylvania	9	14	5
California Institute of Technology	11	13	2
Carnegie Mellon University	11	13	2
Texas Christian University	11	13	2
Boston College	10	13	3
Boston University	10	13	3
Middlebury College	10	13	3
Saint Louis University	10	13	3
Yale University	10	13	3
Georgetown University	9	13	4
Harvard University	13	12	-1
Johns Hopkins University	11	12	1
Tufts University	11	12	1
University of Chicago	12	11	-1
University of Notre Dame	8	11	3
Wake Forest University	8	10	2
Washington and Lee University	4	10	6
Washington University in St Louis	5	7	2
Minimum	4%	7%	-2
Maximum	81%	83%	9
Mean	13%	17%	4
Median	11%	15%	3

Note: Pell enrollments unavailable in IPEDS prior to 2008-09 year; therefore, data is provided for earliest year available. *Data Source* : Integrated Postsecondary Education Data System (IPEDS) *Student Financial Aid and Net Price* .

(median 15%) at these schools by 2014-15 (see Table 10). The only institution in the sample to exceed the national average for Pell enrollment was Berea College, an outlier

due to its aforementioned admissions and aid policies. No school within the remaining universities even approached the national average. Among these 52 institutions, the proportion of students receiving Pell ranged from 4% to 21% in 2008-09 (Washington and Lee University and Syracuse University, respectively) and 7% to 25% in 2014-15 (Washington University in St. Louis and Syracuse University, respectively). Furthermore, it is possible that these increases in Pell enrollment may be due to increasing student need in post-Recession years, rather than specific institutional efforts to enroll more low-income students. Regardless, these statistics remain a stark reminder of the gaps in access that remain at our country's most selective schools, and consequently, provide a telling rationale for Congress' inquiries and corresponding calls for action.

Thus, this quantitative data on Pell Grant enrollments and the stated commitments provided in institutional responses to Congress provide a preliminary context for examining the complex and often tenuous relationship between college endowments, institutional financial aid policy, spending on student aid, and ultimately, college access at 30 of the wealthiest private colleges in the country

Setting the parameters for financial aid policy: Defining low-income and determining student financial need

The 2008 Congressional letters to colleges and universities demonstrated a marked policy interest in the relationship between endowment spending and financial aid, asking several distinct questions regarding university financial aid policy, recruitment of low-income students, and spending on such efforts (see Appendix A for specific questions). In order to determine institutional financial aid policies, frame subsequent

efforts, and identify markers of success, institutions must presumably determine how they define “low-income” and other target student groups.

However, when explicitly asked the question “How is low-income defined?” in 2008, widely different definitions emerged among the study sample of 30 private schools. Whether suggestive of unique institutional philosophies, constraints in aid availability, or the lack of a fundamental definition at the field-level, institutional responses revealed remarkably heterogeneous approaches to identifying low-income students. Several schools were forthright in admitting that they did not have a singular definition for low-income, including the University of Richmond, which stated, “The University seeks students from every income level, with aggressive outreach to students from families of the most modest means. Although the University actively seeks students from families of modest income, we do not define ‘low income’ as a term of art” (2008 response, p. 3). Similarly, George Washington University, Grinnell College, Lehigh University, and MIT each admitted they did not have a single definition for low-income, with Lehigh writing, “The University's focus is on need rather than income” (2008 response, p. 7) and MIT claiming, “We target low-income students in our outreach without finding it necessary to have a definition of low-income” (2008 response, p. 11).

Unsurprisingly, several schools delineated low-income status by Pell Grant eligibility and/or family income. Baylor University, the University of Tulsa, and Smith College all mentioned Pell eligibility as a parameter, with Baylor writing, “Rather than attempting to measure low-income, we have chosen to identify high-need. Specifically, anyone who is Pell eligible is considered high-need” (2008 response, p. 7). Other schools based low-income status on needs analysis formulas, including the federal formula

(FAFSA) and the CSS/Profile formula. Berea College, which requires demonstrated financial need as criteria for admission, expects students' EFCs to "fall within the bottom 1/3rd of college bound Free Application for Federal Student Aid (FAFSA) filers nationally" (2008 response, p. 3). Conversely, New York University delineates low-income status by seemingly high financial standard—"a family's financial status that produces an Expected Family Contribution (as determined by the federal needs analysis formula) of $10,000 or less" (2008 response, p. 9).

Metrics establishing "low-income" by levels family income were more common, though the range of income standards identified was quite wide. At one end of the spectrum, schools including Amherst College and Wake Forest defined low-income as having a family income of $40,000 or less, while Washington and Lee University, Williams College, and Princeton University's designations hovered around $50,000 in family income. Wellesley College, Yale University, and Rice University capped "low-income" around the $60,000 mark, and at the highest end of the spectrum, Dartmouth College described low-income as "students who come from families with incomes less than $75,000 (and typical assets)" (2008 response, p. 6).

Some institutions took a more holistic approach in defining low-income students, without settling on a single metric or definition. For example, Stanford University utilized the College Board's Task Force on College Access for Students from Low-Income Backgrounds as a tool in determining low-income eligibility. The Task Force's parameters included attending schools with large numbers of low-income students or low college enrollment rates, receiving federal subsidies including free or reduced-price lunch

or subsidized housing, being a first-generation college student, or being homeless or in foster care.

The ways in which institutions define low-income doubtlessly shape—and are also shaped by—their financial aid philosophies, policies, and methods for calculating need. Indeed, across sample schools, there was no standard methodology used for calculating a student's eligibility for financial aid. Some utilized solely the FAFSA's methodology, others employed a combination of the FAFSA, an academic index combining class rank and SAT/ACT score, and GPA, many used the CSS/Profile's Institutional Methodology approach, and still, others employed a combination of both the FAFSA and CSS/Profile tools. Further adding to the variety of approaches to calculating student need, several schools discussed whether or not they incorporated a family's assets—including homeownership and investments—into calculations.

For example, Boston University includes "assets, cash flow, household size, number of children in college, and many other considerations" (2008 response, p. 4) in ascertaining a student's demonstrated need, while Duke University and several other schools adopted the "Consensus Approach"—built on the College Board's institutional methodology principles—"which significantly reduces the impact of home equity in need-analysis" (2008 response, p. 4). A few of the wealthiest schools took this approach a step further, removing home equity from need calculations altogether. In 2008, Yale announced that it would expand this approach, excluding the first $200,000 of a family's assets from all needs analysis and reducing the impact of assets over $200,000. As of 2016, Princeton excluded both home equity and retirement savings from determining a student's financial need.

Collectively, I observed wide variation in both institutional definitions of "low income" and subsequent methods for ascertaining student financial need. The heterogeneity in approaches suggests that schools are not simply embracing universal standards for enabling and measuring low-income student college access; rather, they are developing customized definitions and standards, likely based on institutional resources, mission, priorities, and associated constraints. Such metrics, definitions, and methods are doubtlessly connected to the development evolution of financial aid policies at postsecondary institutions, which unsurprisingly, also varied across the 30 institutions in my sample.

Financial aid policies at wealthy, private colleges

Despite the seemingly vast endowment wealth held by these colleges and universities, I noted wide heterogeneity in institutional financial aid policies and priorities. Even within this group of wealthy schools, each college is *choosing* what groups of students to prioritize or target and, consequently, tailoring how it distributes financial aid, based on factors including mission, financial constraints, institutional aspirations, and student enrollments (e.g., graduate students, FTE enrollment). While *every* school espoused a commitment to student aid, affordability, and access in their responses, the nature, funding, and scope of financial aid policies varied across sample schools.

Undoubtedly, the financial aid policies at the 30 sample schools are relatively generous, particularly when compared to the majority of postsecondary institutions in the U.S. Over two-thirds of sample schools employed need-blind policies in both 2008 and

2016—meaning that students' financial circumstances are not taken into account when admissions decisions are made—and 80% of institutions in the sample met the full financial need of all admitted (domestic) students. While these two policies were not necessarily mutually exclusive (e.g., Berea and Tufts are not need-blind, but meet full need; NYU is need-blind, but does not guarantee meeting a student's full need), the large number of sample institutions adopting these policies—relative to the majority of postsecondary institutions, which cannot afford them—offers an initial indicator that wealthy, private schools are indeed offering substantial financial aid to academically admissible students. Within the sample, schools' policies of being need-blind or meeting full need did not change from 2008 to 2016, with one exception, as Lehigh University changed from "generally meet[ing] all need" in 2008 (p. 3) to "a new commitment to meet 100 percent of all of our students' demonstrated financial need" by 2016 (p. 1).

Schools offering merit aid were more balanced across the sample, with 16 institutions offering non-need based aid in 2008 and 2016 (and no changes in this policy across the time period). However, many schools stressed that these were "limited" or "competitive;" for example, Boston University stated, "The bulk of University aid funds are awarded to students who apply for need-based assistance" (2008 response, p. 3). In 2016, Smith College highlighted that 97% of institutional aid was need-based and at NYU, "virtually all" of financial aid was based on financial need (2016 response, p. 2). However, in detailing its low-income recruitment and need-based scholarship policy as of 2008, Baylor University explained that merit may also be taken into account. "We offer need-based scholarships to students based on need as demonstrated by the FAFSA and merit" (2008 response, p. 6) it wrote, explaining that scholarships and grants are based on

a formula combining FAFSA-determined need and an academic index based on class rank, ACT/SAT scores, and/or GPA. Similarly, Boston University does not conceal the role of academic performance in determining student grant eligibility, writing, "A student's academic record is an important factor in determining eligibility for Boston University scholarships and need-based grants" (2008 response, p. 3). These two schools were outliers in emphasizing that the awarding of so-called "need-based aid" or grants may still entail a merit component.

While less common than need-blind policies or schools meeting full need across the sample, several institutions also discussed new or existing no-loan or loan cap programs in their responses to Congress. Interestingly, many mentioned plans to launch these initiatives in the upcoming 2008-09 academic year in their 2008 responses, right before the Great Recession would hit its peak. Some schools expanded existing no-loan policies to include wider income groups or all students, while others capped borrowing for certain income groups. Amherst College, one of the first schools to eliminate loans for lower-income students, announced that it would replace all loans with grants during the 2008-09 academic year. Harvard, Dartmouth, and Swarthmore also announced that they would be removing loans from all student aid awards in the upcoming year. Washington and Lee and Yale had recently implemented no-loan programs for all students, while the Emory Advantage, begun in 2007, eliminated loans for incomes up to $50,000 and capped four-year borrowing at $15,000 for students from families with up to $100,000 in income. Columbia, Rice, Duke, and Brown all announced loan elimination programs for the upcoming academic year, covering family incomes up to $60,000 (Columbia and Rice) and $100,000 (Duke and Brown). Williams College, which had announced in its

2008 response that it would be removing loans from all aid packages beginning in 2008-09, was the only school to roll back this policy as of 2016, due to large endowment revenue losses during the Great Recession.

Whether need-blind, meeting full need, and/or offering no-loan policies—there was obvious variation in how such policies were comprehensively implemented at each school. Berea College, while not need-blind due to its requirement that all students are lower-income, offers a tuition-free education for those who are admitted. On the other hand, Rice University was need-blind and met full need in both 2008 and 2016, but capped its no-loan policy at family incomes of $60,000 or less in 2008 and $80,000 or less in 2016. While not need-blind in admissions processes, Washington and Lee University met each admitted student's full-need, was loan-free, and offered merit aid in both 2008 and 2016. In both of its responses, George Washington University, which is neither need-blind nor meets full need, emphasized its fixed price tuition policy, which maintains a set tuition level and consistent financial aid for enrolled students for up to five years.

Financial aid does not always come without strings attached, however. Though the cost of attendance remains *relatively* low at many of these schools—particularly when compared to sticker price—many still hold an expectation of student financial contributions in the form of student employment/work study, borrowing, or parental contributions. In their 2008 responses, some expressed this expectation in terms of "a partnership among a student, her family, and the college" (Wellesley College, 2008 response, p. 5), while others explicitly stated that that parents were expected to contribute to educational expenses as their resources permitted. Though many schools had adopted

generous no-loan policies, many still held an expectation of student work or contributions, such as Princeton University:

> Some have suggested that perhaps all students, even those from families with significant resources, should attend Princeton for free. We believe that these families should contribute toward the cost of educating their children, recognizing that even families paying full price pay less than half of what their children's educations actually cost. We also believe it is appropriate to ask students to help contribute to the costs of their educations through a modest amount of term-time and summer work, although one of our recent improvements in financial aid was to scale back on these expectations. (2008 response, p. 2)

Still, in both 2008 and 2016 several schools had announced or expanded financial aid initiatives so generous that higher-income families could, quite conceivably, have to contribute relatively little to their child's education. In 2008, Williams College wrote, "The family income at the 95th percentile of our aided group has risen to $178,600" and "We aid some families whose incomes place well into the top 5% nationally," (p. 2) while Columbia stated that the University's loan replacement program would provide up to $5,000 a year in grants (rather than loans) for students with family incomes up to $150,000. Harvard's Financial Aid Initiative, launched in 2004, evolved from requiring a "zero to 10 percent standard" (2008 response, p. 2) for students of family incomes from $60,000 to $120,000 and a maximum of 10% of family income for those making up to $180,000 in 2008 to being "effectively tuition free" (2016 response, p. 14) for incomes up to $160,000 by 2016. Stanford announced a similar policy, charging no tuition for incomes up to $100,000 in 2008 and $125,000 by 2016. What is more, Princeton wrote in 2016, "For families with incomes up to $180,000, our package covers more than half of tuition, and we provide some aid for families with incomes up to about $250,000" (p. 2). Similarly, MIT claimed, "Even families earning more than $200,000 may qualify for

need-based financial aid based on their family circumstances, such as if two or more children are in college at the same time" (2016 response, p. 12). Thus, for some of the wealthiest schools within this group, the parameters for defining "need-based" financial aid go well beyond low- and middle-income students, and indeed, as stated by one college, benefit families in the top five percent of incomes nationally.

Finally, some schools offered explanations for aid policies that did not meet or exceed full financial need. Lehigh University discussed its tuition dependence as a limitation, arguing that it "constrains the University's ability to offer financial that exceeds demonstrated financial need, as some institutions have done" (2008 response, p. 2). NYU cited its high Pell enrollment, tuition dependency, and larger undergraduate enrollment as justification for being need-blind, but not meeting full need: "NYU is not among the relatively small number of institutions able to meet its students' full need . . . therefore, our financial aid policy is based primarily on distributing aid dollars as equitably as possible to needy students," it noted (2008, p. 8). The wide variation in implementation of ostensibly similar aid policies suggests that colleges and universities are distributing endowment resources and tuition revenues in ways that allow them to meet institutional enrollment goals while still managing financial obligation and limitations. Moreover, it is also critical to consider how such variations in admissions processes (i.e., need-blind or not), financial aid polices, and income thresholds introduce greater confusion and complication into the process for prospective students. Such questions are particularly important to consider when lower-income or first-generation students and their families are attempting to navigate the admissions and aid processes

among a seemingly similar group of peer schools with notably different polices and outcomes.

Meeting growing student need: Expansion of financial aid spending and initiatives

In both the 2008 and 2016 letters, Congress highlighted concerns about rising costs of tuition and fees, including the impact on low- and middle-income families. However, many schools suggested sizeable growth in financial aid amounts and expansion in need-based financial policies from 2008 to 2016, particularly in comparison to parallel increases in tuition and fees or costs of attendance. While many schools' endowments had finally approached pre-Recession levels in 2016, they continued to grow student aid budgets and decrease net costs for lower- and middle-income students throughout this time period. However, 2016 responses suggest a focus on maintaining and expanding current financial aid efforts and funding, rather than introducing new initiatives, which was particularly emphasized in the earlier responses.

The increasing costs of college attendance have been subject to rising scrutiny in many years, and were cited as a rationale for both Congressional inquiries. Given the seemingly generous and growing financial aid initiatives discussed in responses to Congress, Table 11 provides an overview of the changing costs of attendance, net prices

Table 11

Student Cost of Attendance and Net Price Data for First-Time, Full-Time Undergraduates attending 30 Private Nonprofit Colleges and Universities included in Qualitative Sample, 2008-09 and 2014-15

Institution Name	Total Cost of Attendance (COA)		Percent Increase in COA	Average Net Price for FTFT Students Receiving Grant/Scholarship Aid		Percent Change in Net Price for FTFT Students Receiving Grant/Scholarship Aid	Average Net Price for FTFT Students with Family Income Less than $30,000		Percent Change in Average Net Price for FTFT Students with Family Incomes <$30,000
	2008-09	2014-15	2008-09 to 2014-15	2008-09	2014-15	2008-09 to 2014-15	2008-09	2014-15	2008-09 to 2014-15
Amherst College	$50,230	$64,006	27.4%	$14,835	$16,861	13.7%	$3,317	$3,953	19.2%
Baylor University	$39,276	$53,960	37.4%	$26,444	$34,413	30.1%	$19,464	$28,128	44.5%
Berea College	*	$33,492	*	*	$3,125	*	*	$4,150	*
Boston University	$51,100	$63,644	24.5%	$28,548	$32,732	14.7%	$19,694	$21,015	6.7%
Brown University	$50,560	$62,694	24.0%	$21,700	$22,957	5.8%	$5,732	$4,695	-18.1%
Columbia University	$51,406	$66,604	29.6%	$18,132	$17,678	-2.5%	$4,870	$7,169	47.2%
Dartmouth College	$50,547	$65,133	28.9%	$19,011	$21,348	12.3%	$4,007	$6,419	60.2%
Duke University	$50,925	$63,999	25.7%	$22,519	$21,295	-5.4%	$9,220	$11,904	29.1%
Emory University	$49,708	$61,344	23.4%	$25,060	$25,928	3.5%	$13,091	$11,943	-8.8%
George Washington University	$52,692	$63,210	20.0%	$27,966	$37,404	33.7%	$16,739	$21,063	25.8%
Grinnell College	$46,400	$59,317	27.8%	$22,083	$28,869	30.7%	$5,878	$10,865	84.8%
Harvard University	$50,250	$62,250	23.9%	$16,156	$15,742	-2.6%	$2,170	$6,603	204.3%
Lehigh University	$49,540	$58,835	18.8%	$24,744	$27,715	12.0%	$11,509	$19,233	67.1%
Massachusetts Institute of Technology	$50,100	$61,030	21.8%	$18,756	$21,691	15.6%	$3,400	$8,803	158.9%
New York University	$52,082	$66,022	26.8%	$34,011	$35,106	3.2%	$19,612	$23,592	20.3%
Princeton University	$49,830	$58,965	18.3%	$17,381	$17,901	3.0%	$3,110	$3,461	11.3%
Rice University	$43,586	$56,316	29.2%	$18,005	$22,462	24.8%	$3,008	$7,159	138.0%
Smith College	$50,588	$62,330	23.2%	$22,296	$26,318	18.0%	$11,682	$8,911	-23.7%
Stanford University	$51,760	$62,801	21.3%	$19,697	$19,245	-2.3%	$3,120	$1,932	-38.1%
Swarthmore College	$50,381	$62,450	24.0%	$19,408	$21,580	11.2%	$3,499	$7,864	124.7%

Table 11 Continued

Institution Name	Total Cost of Attendance (COA)		Percent Increase in COA	Average Net Price for FTFT Students Receiving Grant/Scholarship Aid		Percent Change in Net Price for FTFT Students Receiving Grant/Scholarship Aid	Average Net Price for FTFT Students with Family Income Less than $30,000		Percent Change in Average Net Price for FTFT Students with Family Incomes <$30,000
	2008-09	2014-15	2008-09 to 2014-15	2008-09	2014-15	2008-09 to 2014-15	2008-09	2014-15	2008-09 to 2014-15
Swarthmore College	$50,381	$62,450	24.0%	$19,408	$21,580	11.2%	$3,499	$7,864	124.7%
Tufts University	$51,400	$63,400	23.3%	$22,715	$26,976	18.8%	$9,168	$5,954	-35.1%
University of Notre Dame	$49,030	$62,461	27.4%	$24,390	$26,698	9.5%	$7,267	$11,401	56.9%
University of Richmond	$49,090	$59,630	21.5%	$18,800	$21,744	15.7%	$4,218	$7,569	79.4%
University of Rochester	$50,550	$63,268	25.2%	$30,317	$33,682	11.1%	$12,424	$11,476	-7.6%
University of Tulsa	$37,530	$52,055	38.7%	$20,686	$25,355	22.6%	$18,122	$18,576	2.5%
Wake Forest University	$49,820	$62,538	25.5%	$28,737	$24,929	-13.3%	$22,459	$13,090	-41.7%
Washington and Lee University	$49,268	$60,084	22.0%	$18,991	$21,379	12.6%	$2,974	($134)	-104.5%
Wellesley College	$50,026	$61,088	22.1%	$19,310	$22,138	14.6%	$3,533	$9,349	164.6%
Williams College	$49,530	$64,020	29.3%	$13,789	$21,546	56.3%	$1,679	$3,633	116.4%
Yale University	$51,400	$63,970	24.5%	$17,686	$18,164	2.7%	$6,516	$6,554	0.6%
Minimum	$37,530	$33,492	18.3%	$13,789	$3,125	-13.3%	$1,679	($134)	-104.5%
Maximum	$52,692	$66,604	38.7%	$34,011	$37,404	56.3%	$22,459	$28,128	204.3%
Mean	$49,262	$60,697	25.4%	$21,799	$23,766	12.8%	$8,672	$10,211	40.9%
Median	$50,230	$62,456	24.5%	$20,686	$22,300	12.3%	$5,878	$8,334	25.8%

Notes: FTFT=Full-Time First-Time. Total cost of attendance includes tuition, fees, room, board, books, supplies, and other expenses. Net price unavailable in IPEDS prior to 2008-09 year; therefore, data is provided for earliest year available. Asterisk (*) for Berea College indicates different methodology for calculating costs; thus, information is not included in those years. *Data source:* Integrated Postsecondary Education Data System (IPEDS) *Student Financial and Net Price* and *Student Charges.*

Table 12

Total Institutional Grant Aid, Average Institutional Grant Award, and Proportion of First-Time, Full-Time Undergraduates Receiving Institutional Grant Aid at 30 Private Nonprofit Colleges and Universities included in Qualitative Sample, 2008-09 and 2014-15

Institution Name	Total amount of Institutional Grant Aid Awarded to FTFT Undergrads		Percent Change in Total Institutional Grant Aid Awarded to FTFT Undergrads	Average amount of Institutional Grant Aid to FTFT Undergrads		Percent Change in Average Institutional Grant Aid Awarded to FTFT Undergrads	Percent Increase in COA	Percent of FTFT Undergrads Receiving Institutional Grant Aid	
	2008-09	2014-15	2008-09 to 2014-15	2008-09	2014-15	2008-09 to 2014-15	2008-09 to 2014-15	2008-09	2014-15
Amherst College	$7,436,722	$13,072,158	75.8%	$33,650	$44,922	33.5%	27.4%	50	62
Baylor University	$30,626,549	$61,404,234	100.5%	$10,907	$17,706	62.3%	37.4%	92	96
Berea College	$9,499,029	$9,918,591	4.4%	$23,000	$23,843	3.7%	*	100	100
Boston University	$47,792,819	$55,614,326	16.4%	$21,490	$29,457	37.1%	24.5%	54	48
Brown University	$18,942,619	$26,161,297	38.1%	$29,598	$37,642	27.2%	24.0%	41	45
Columbia University	$19,914,982	$34,576,721	73.6%	$31,215	$47,043	50.7%	29.6%	46	51
Dartmouth College	$16,590,142	$22,114,402	33.3%	$31,540	$41,963	33.0%	28.9%	48	46
Duke University	$21,630,515	$30,689,014	41.9%	$29,712	$41,083	38.3%	25.7%	43	43
Emory University	$18,477,437	$19,763,121	7.0%	$23,011	$33,497	45.6%	23.4%	48	43
George Washington University	$31,857,939	$45,834,589	43.9%	$23,598	$24,829	5.2%	20.0%	55	77
Grinnell College	$9,596,422	$11,662,776	21.5%	$23,124	$29,303	26.7%	27.8%	89	91
Harvard University	$35,604,962	$37,997,153	6.7%	$34,302	$44,029	28.4%	23.9%	62	52
Lehigh University	$14,580,837	$18,239,273	25.1%	$23,747	$29,950	26.1%	18.8%	51	47
Massachusetts Institute of Technology	$19,475,622	$21,589,653	10.9%	$30,383	$37,224	22.5%	21.8%	61	56
New York University	$37,644,175	$84,621,009	124.8%	$14,986	$28,179	88.0%	26.8%	56	51
Princeton University	$22,344,940	$30,928,218	38.4%	$31,339	$39,805	27.0%	18.3%	57	59
Rice University	$12,747,654	$16,067,953	26.0%	$23,917	$31,692	32.5%	29.2%	68	54
Smith College	$9,816,201	$14,035,767	43.0%	$26,388	$34,656	31.3%	23.2%	58	66
Stanford University	$31,791,300	$34,022,933	7.0%	$29,907	$40,600	35.8%	21.3%	62	50
Swarthmore College	$5,553,486	$8,277,379	49.0%	$30,514	$39,044	28.0%	24.0%	49	52

Table 12 Continued

Institution Name	Total amount of Institutional Grant Aid Awarded to FTFT Undergrads		Percent Change in Total Institutional Grant Aid Awarded to FTFT Undergrads	Average amount of Institutional Grant Aid to FTFT Undergrads		Percent Change in Average Institutional Grant Aid Awarded to FTFT Undergrads	Percent Increase in COA	Percent of FTFT Undergrads Receiving Institutional Grant Aid	
	2008-09	2014-15	2008-09 to 2014-15	2008-09	2014-15	2008-09 to 2014-15	2008-09 to 2014-15	2008-09	2014-15
Tufts University	$12,567,736	$19,060,554	51.7%	$25,236	$34,282	35.8%	23.3%	38	41
University of Notre Dame	$24,660,156	$37,903,430	53.7%	$24,082	$34,552	43.5%	27.4%	51	55
University of Richmond	$12,184,593	$17,696,046	45.2%	$29,011	$37,333	28.7%	21.5%	57	58
University of Rochester	$21,981,942	$34,202,046	55.6%	$18,242	$28,012	53.6%	25.2%	94	85
University of Tulsa	$9,484,114	$16,238,313	71.2%	$14,613	$23,602	61.5%	38.7%	94	90
Wake Forest University	$13,785,871	$17,076,700	23.9%	$21,848	$35,282	61.5%	25.5%	53	38
Washington and Lee University	$6,528,534	$9,937,660	52.2%	$34,003	$43,207	27.1%	22.0%	42	49
Wellesley College	$10,436,002	$12,834,631	23.0%	$31,339	$37,638	20.1%	22.1%	56	58
Williams College	$9,624,145	$10,642,897	10.6%	$35,645	$40,777	14.4%	29.3%	50	48
Yale University	$24,565,881	$28,503,606	16.0%	$33,019	$43,650	32.2%	24.5%	56	48
Minimum	$5,553,486	$8,277,379	4.4%	$10,907	$17,706	3.7%	18.3%	38.0%	38.0%
Maximum	$47,792,819	$84,621,009	124.8%	$35,645	$47,043	88.0%	38.7%	100.0%	100.0%
Mean	$18,924,778	$26,689,548	39.7%	$26,446	$35,160	35.4%	25.4%	59.4%	58.6%
Median	$17,533,790	$20,676,387	38.3%	$27,700	$36,253	32.4%	24.5%	55.5%	52.0%

Notes: FTFT=Full-Time First-Time. Total cost of attendance includes tuition, fees, room, board, books, supplies, and other expenses. Net price unavailable in IPEDS prior to 2008-09; therefore, data is provided for earliest year available.(*) for Berea College indicates different institutional methodology for calculating costs; thus, information is not included for those years. *Data source:* Integrated Postsecondary Education Data System System (IPEDS) *Student Financial and Net Price* and *Student Charges.*

for aid recipients, and net prices for students from family incomes less than $30,000 at the sample institutions from 2008-09 to 2014-15 (net price data was not available in earlier years; 2008-09 was the earliest year available). Similarly, Table 12 supplements this data, providing corresponding data on institutional financial aid in these same years, including average institutional grant for full-time, first-time (FTFT) undergraduates, total institutional grant aid awarded to FTFT undergraduates, and proportion of FTFT undergraduates receiving institutional grant aid.

While costs of attendance (COA, or tuition, fees, room, board, and other direct and indirect expenses) at these 30 private schools increased by a mean of 25.4% and median 24.5% from 2008-09 to 2014-15, the average net price for students receiving grant or scholarship aid increased by an average of 12.8% and median of 12.3%, suggesting that the total and average amounts of student aid may have increased over this time, as well. The smallest increase in COA from 2008-09 to 2014-15 occurred at Princeton University, increasing its costs by about $9,000 (or 18.3%) over six years, while the largest was at the University of Tulsa, raising its sticker price from $37,530 to over $52,000 (or 38.7%). However, changes in average costs for low-income students (less than $30,000 in family income) were more variable over this time, ranging from a drop of over 100% (over $3,000) at Washington and Lee University to an increase of 204% at Harvard. Average net prices for this same group of low-income students ranged from effectively zero (Washington and Lee) to $23,500 at NYU and over $28,000 at Baylor University in 2014-15 (see Table 11). Still, as of 2014-15, the mean net price paid by FTFT students with family incomes of less than $30,000 at these 30 schools was over $10,000 and median over $8,000, representing a minimum of 28% to 34% of annual

family income (assuming $30,000 in family income, though many in this category have less)—seemingly an initial barrier to increasing student access.

Total institutional grant aid awarded to full-time, first-time undergraduates increased by an average of 39.7% and a median of 38.3% at sample schools during this time, while average institutional grant aid increased by a mean of 35.4% and median of 32.4% (see Table 12). This data suggests that, despite the Great Recession's destructive impact on endowment values, most schools still increased total institutional grant aid or average award amounts by a proportion larger than cost increases over this time. Baylor University, which increased average institutional grant aid by 62.3% over this time period, still offered the lowest amount of grant aid to FTFT students ($17,706 in 2014-15), on average. However, it also provided institutional grant aid to 96% of FTFT undergraduates in 2014-15, second only to Berea College (see Table 12). Recall that Baylor was one of the universities including a merit component in their financial aid needs analysis; thus, it is likely that the large proportion of aided students is reflective of tuition discounting strategies and institutional student recruitment strategy. Conversely, Berea only admits students with significant financial need and does not take academic merit into account when awarding financial aid. On the whole, the average proportion of FTFT undergraduates receiving institutional grant aid at schools in my sample decreased slightly from 2008-09 to 2014-15, from a mean of 59.4% to 58.6% and from a median of 55.5% to 52.0%.

The 30 institutional responses to Congress buttressed these statistics, emphasizing that though costs were increasing, amounts of aid and strength of aid efforts were growing as well. Many schools expanded their institutional aid budgets in order to

increase student awards from 2008 to 2016. These efforts may have helped to increase low-income student access (Pell enrollment as a proxy; see Table 10)**,** but in many cases, also improved support for middle- and even higher-income students. For example, Wellesley College was one of many schools reporting large increases in total institutional aid budgets in their replies to Congress (aid to all undergraduates, not just FTFT students, as presented in Tables 11 and 12) growing from $38.4 million to $51.3 million from FY2009 to FY2015 (33.6% increase). MIT also reported growing its total undergraduate financial aid budget significantly, increasing by 41.4%, from $65.4 million in FY2008 to $92.5 million in FY2015.

Similarly, schools emphasized the relatively small increases in costs, relative to larger increases in student aid, in their responses. In 2008, Columbia estimated that costs of attendance would increase by 5.0% from the prior year, but total grants per student would increase by 13%, on average. Others offered more broad policy perspectives, including Duke University and Baylor, which both emphasized that increases in tuition costs were typically outpaced by increases in grant aid. In its 2008 response, Amherst College went a step further, claiming that average costs per student had actually declined since 1997-98, after adjusting for inflation. Similar figures were echoed in 2016 responses, as MIT reported a 3.7% increase in student tuition and fees from 2015-16 to 2016-17, offset by a 10.4% increase in total undergraduate financial aid. Analogous to Amherst's response in 2008, Williams College noted:

> But when it comes to controlling the price, it's worth repeating the fact, since it is so counter to public perception, that the average price that aided students (from 95% of the income spectrum) pay to Williams is what it was in real terms 30 years ago. (2016 response, p. 9)

In 2016 responses, many institutions also announced expansion of financial aid funding targeting low- or middle-income students. NYU, which claims that it lacks the resources to meet the demonstrated need of all students, wrote that it had increased average institutional grants for Pell-eligible students from covering 55% to 82% of tuition and fees in the past five years. Brown University explicitly mentioned efforts to decrease costs for students who "fall into an unintentional gap in financial aid programs — directly between students who have no need for aid and those who have high need and therefore receive significant aid" (2016 response, p. 2), increasing aid for students with family incomes between $100,000 and $200,000.

Finally, many colleges announced more broad growth in existing programs in 2016. Yale University announced that it would be opening two new residential colleges beginning in 2017, as it expanded undergraduate enrollment by 15% over several years. Yale also announced that it would add over $2 million to its financial aid program in 2016-17, reduce work requirements and summer earnings contributions for low-income students, and still maintain its commitment to meeting full student need. Many other schools—particularly those in the Ivy League—bolstered existing no-loan, loan cap, or tuition free financial aid policies. As an example, Brown announced that it was loan-free for all students with family incomes up to $100,000 and required no parental contributions for incomes up to $50,000 and family assets up to $100,000. Rice University expanded their no-loan income threshold from $60,000 to $80,000, and capped loans at a total of $10,000 over four years for all other students. While not loan-free, The University of Richmond capped maximum self-help portions of aid packages at

$5,000 for first-year students, $6,000 for sophomores, and $7,000 for juniors and seniors in 2015-16.

Overall, both IPEDS data and institutional responses confirm that, for the most part, growth in financial aid initiatives and spending are outpacing parallel growth in costs of attendance over time. Institutions reiterated these commitments to keeping costs as low as possible for lower-income students, with MIT writing, "For instance, last month, we announced the Institute's 2016-17 tuition and financial aid rates. While tuition and fees will increase by 3.7%, the budget for undergraduate financial aid will grow at nearly three times that rate, by 10.4%" (2016 response, p. 2). However, net prices remain a formidable barrier for both prospective and enrolled students at these schools, if they are even able to overcome the initial "sticker shock" of costs of attendance (in nearly every case, over $50,000 in 2014-15) and apply to selective private colleges. For example, MIT's sticker price of $61,030 in 2014-15 represents at least two times the annual family income for enrolling FTFT students with incomes less than $30,000 and average net price remains relatively high for that group, at $8,803 in the same year (see Table 11).

However, outliers remain, as some of these wealthy private schools have worked to either stabilize or decrease net prices for lower-income students. Amherst, Emory, Princeton, Tufts, the University of Tulsa, and Yale represent a group of schools that have kept net prices for lower-income students in 2014-15 within $1,000 of 2008-09 costs, while net prices at Brown, Smith, Stanford, and the University of Rochester have actually decreased for lower-income students over this time. Stanford, which reduced average

costs for lower-income students from $3,120 in 2008-09 to $1,932 in 2014-15, credits its endowment for increases in student aid:

> Stanford's endowment is crucial to insuring affordability for its students and enables the university to increase the amount spent on aid. As a result, the average net price of a Stanford education — what an average student pays after financial aid is taken into account — actually decreased in real terms (adjusting for inflation) at an average rate of 0.1 percent per year over the last 10 years. For students from low and middle-income families, Stanford costs far less to attend today than it did in the late 1990s, which is why the vast majority of students graduate with no student debt. (2016 response, p. 2)

Armed with a better understanding of the various financial aid policies, initiatives, spending, and net prices for lower-income students at these schools, it is to this specific issue mentioned by Stanford that I now turn: what precisely is the role of institutional endowments in providing financial aid, affordability, and student access?

Endowments' contributions to operating budgets, institutional priorities, and student financial aid

Given these differential financial aid policies based on both institutional priorities and resource constraints, a critical question remains: how do university endowments contribute to financial aid policies and spending at the wealthiest, private colleges? Through analysis of responses to Congress in both 2008 and 2016, I found that even within this selective and wealthy group of schools, there still exists great variation based on institutional tuition dependence, reliance on the endowment to cover the general operating budget, and the subsequent balance of the operating budgets' and endowments' contributions to funding financial aid.

For many private institutions, which receive little state support, endowments play a critical role in supporting day-to-day expenditures and annual operating budgets. Schools with smaller endowments or larger enrollments are often dependent on tuition to fund college priorities, creating some fluctuations in year-to-year budgets and spending. However, institutions with larger endowments may be able to rely on endowment assets to provide a stable source of income to support mission-driven priorities and programs, such as faculty salaries and support, maintenance of campus infrastructure and technology, academic departments, and large amounts of student financial aid.

To provide context, the *NACUBO-Commonfund Study of Endowments* annually collects and aggregates data on all responding college and university endowments' support of operating budgets (see Table 13). While this dataset includes both public and private nonprofit institutions, it is illustrative in understanding the correlation between endowment size and support of universities' operations. As of 2014-15, institutions with less than $25 million in endowments reported, on average, 4.7% (median of 0.3%) of institutional operating budget was funded by the endowment, while at the wealthiest of colleges (endowments over $1 billion), endowments provided 16.5% of annual operating budget support, on average (median of 3.7%). Simply put, as endowment assets increase, colleges are able to rely more on endowment revenues as a stable source of income and less on tuition and fees to support day-to-day operations.

Within my sample, nearly all institutions wrote that they were dependent on endowment income to support annual operating expenditures/budgets. While this dependence varied from school to school, the wide range of proportional contributions was quite surprising. In both 2008 and 2016 responses, the endowments of colleges that

Table 13
Percentage of Operating Budget Funded by Endowment, 2014-15

	All Institutions	Over $1 Billion	$501 Million to $1 Billion	$101-$500 Million	$51 to $100 Million	$25-$50 Million	Under $25 Million
Number of institutions	812	94	77	261	167	117	96
Average percentage of operating budget funded by endowment	9.7	16.5	11.8	10.2	8.3	8.2	4.7
Median percentage of operating budget funded by endowment	3.7	8.1	7.1	6.2	3.0	2.0	0.3
Increased	42	42	46	49	44	38	26
Decreased	21	28	23	21	22	20	12
No change	11	10	5	12	12	13	10
No answer/uncertain	26	20	26	18	22	29	52

Note: All responses are provided in percent values. Data includes both public and private nonprofit colleges and universities.
Data Source: 2015 NACUBO-Commonfund Study of Endowments, Figure 5.9, p. 52.

claimed to be highly tuition dependent, such as Baylor University, and Boston University, and New York University, played a relatively small role in supporting institutional operating budgets. However, each endowment's contribution was also quite variable when comparing among otherwise similar and wealthier schools, such as Ivy League institutions or liberal arts colleges.

Responses to Congress revealed wide variation in the contribution of each school's endowment to operating budgets, with no standard metric or relationship applied across sample schools. The contrast between schools in the degree of endowment dependence was striking. At the lower end of the scale, endowment income covered only about 3.7% of the operating budget at Baylor University in 2015-16 (Osborne, 2016). On the other hand, Berea College wrote in 2008 that 79% of its $41 million operating budget was funded by endowment income and "our concerns that any attempt by external agencies to instruct us on how to spend our endowment income would be a real threat to

Berea's unique legacy of access and affordability for needy families and their children" (p. 2). That same year, Grinnell, another small liberal arts college, noted a "heavy reliance on the endowment (more than 50% and amongst the highest of all liberal arts colleges) to the College's operating budget" (2008 response, p. 12), while Smith College's endowment funded 30% of operations. Among Ivy League institutions, endowment contributions also varied; as of 2016, Brown's was 16%, Dartmouth's was 24%, Yale's 33%, Harvard's 35%, and Princeton's endowment provided 50% of the college's annual operating budget.

Many schools also exhibited increases in these proportions over time. Tufts University reported that the endowment's support of the operating budget had grown from 3.9% in 2002-03 to 8.1% in 2006-07. Notre Dame, citing endowment income's support for lessening its dependence on tuition revenue, increased its endowment's support of the operating budget from 29% in 2004-05 to 37% in 2014-15. After increasing the endowment's contribution to the operating budget from 15% in 1993-94 to 45% in 2008-09, Yale reported that endowment revenue represented "approximately one-third of the operating budget – consistently," as of 2016 (p. 2). New York University, which repeatedly discussed its higher tuition dependence and FTE enrollment relative to its peers subject to both Congressional requests, reported the lowest endowment contribution to operating budgets of all schools. "NYU is far more tuition dependent than its peers – over 60 percent of its annual budget comes from tuition income, while only five percent comes from endowment income," it noted (2008 response, p. 3).

The ways in which institutions apportion their endowment funds and investment revenues—whether choosing to provide considerable and stable support for the operating

budget or restrict large amounts of endowment funds by donor or board requests—have critical implications for how much of endowments are (or can be) devoted to student financial aid, which was a central focus of both Congressional requests. As New York University claims in its 2016 response, the lack of endowment income to support its budget hurts its ability to provide financial aid and meet full student need:

> Financial aid from endowment earnings adds to spending power of a university's budget; for universities with large per student endowments, the endowment actually pays the university to fund the financial aid, so that the school has revenue equal to the full amount of tuition revenue to spend. By contrast, financial aid funded directly from the budget – as is the case with most of the financial aid provided by NYU – actually reduces the amount of tuition revenue available to the institution to spend and puts budgetary pressure on the operations of the university. (2016 response, pp. 2-3)

Given the variability in endowments' contributions to operating budgets, it is unsurprising that the primary sources of funding for financial aid budgets also differed greatly between seemingly similar schools. As of 2008 responses, Wellesley College (17%) and the University of Richmond (22%) reported a smaller role for operating budgets in funding aid. Wake Forest reported a larger role for these general budget funds in providing student aid, with $17.8 million of its $35.4 million financial aid budget (or 41.8%) funded by "unrestricted operating funds (i.e., tuition)" (2008 response, p. 5). Rice University, which described its entire financial structure as "endowment dependent" (2008 response, p. 8), reported that its endowment provided 92% of funding for undergraduate and graduate financial aid in 2016. Princeton University reported that 80% of its financial aid budget was funded by endowments in 2014-15 (down from 85% in 2008); however, Columbia, an Ivy League peer with similar financial aid policies (meets full-need, need-blind, loan-free as of 2015-16), reported nearly the opposite approach:

"Total financial aid provided in fiscal year 2015 was $423 million, of this amount approximately 78% was funded by current operating funds and operating gifts, and 22% was funded by endowment distributions" (2016 response, p. 2).

As discussed earlier, financial aid was listed as one of the top five restrictions of every sample school's endowment in both response years, with most institutions ranking it in the top three categories of endowment restrictions. Among schools reporting specific amounts and proportions of restricted endowments (permanent or temporary) designated for aid in 2014-15, Baylor University ($437.8 million, or 45% of total restricted endowment) and Wake Forest ($353.7 million, or 53% of restricted endowment) topped the list. On the other hand, only 11% of restricted endowment was designated for student aid at Rice University, where it remained the second-highest category of restrictions, with other institutions falling at all proportions in-between.

Finally, the amounts and proportions of total endowment payout spent directly on student aid in 2014-15 was equally heterogeneous, ranging from 13% at Emory to 68% at Berea College in 2014-15. Berea, an endowment-driven institution with little tuition revenue, depends on endowment spending to fund its generous student aid program. However, Emory University, a much larger university with significant graduate enrollments, a hospital, and a larger and more diverse revenue pool, funded 82% of financial aid expenditures through its general operating budget and only 13% via endowment revenues. Baylor University spent 40% of its endowment payout on student aid (including merit aid) in 2014-15, a similar proportion to its 45% of restricted endowment earmarked for student aid, while Swarthmore College spent $30 million (47%) of its total endowment distribution on financial aid in that same year. Boston

University, NYU, and Lehigh University all wrote that their tuition dependency constrained their institutions' ability to provide greater financial aid funding from the endowment. Specifically, Boston University commented in 2016 that its endowment distributed only $51 million in 2014-15, while its financial aid budget was $206 million. Thus, the university wrote, "In order to help students afford a BU education, the University has chosen to allocate significant undergraduate financial aid from our operating budget" (2016 response, p. 14).

Whether based on degree of tuition dependence, institutional prioritization, donor preferences, or simple accounting tricks, the significant variation in endowments' contribution to university priorities—even among a tremendously well-resourced group of schools—suggests potential for fungibility in how colleges could adapt and modify their policies in response to potential governmental tax and endowment regulations. Why do universities with seemingly similar financial resources and missions can vary so greatly in how much their endowments support general operating budgets, which portions are restricted, and finally, which areas are prioritized by endowment payouts? Are these divisions as immutable as the institutions suggest in their replies to Congress, or can they modify their financial endowment management strategies if pressured to do so? What is more, if pressured by Congress and federal regulations, could an institution simply shift the proportion of funding for student financial aid away from operating budgets and increasingly toward endowments? Would such regulations represent moves in Bowen's (1980) "zero-sum game," with little to no impact on student costs and aid, or such would changes in policy have capacity to enact meaningful reform on college costs, financial aid, and low-income student access?

The role of capital campaigns and fundraising

Cantwell (2015) argues that endowment growth or "amassing wealth" (p. 174) is central to the "status treadmill" as universities attempt to increase prestige and status and gain visual markers of competitive advantage over peer schools. In both 2008 and 2016 responses to Congress, several schools mentioned recent, ongoing, or upcoming capital campaigns, typically orchestrated in order to grow institutional endowments via large donor gifts to the endowment. In this final section, I explore the institutions that discussed capital campaigns and fundraising initiatives in their responses to Congress. In particular, I focus on fundraising campaigns explicitly tied to financial aid initiatives and explore the potential impact of these targeted campaigns on institutional grant aid, low-income student enrollment, and student costs over time.

In their 2008 responses to Congress, seven of the 30 institutions mentioned recent or ongoing fundraising campaigns prioritizing student aid. Most of these campaigns identified financial aid as a top priority of their capital campaigns, such as Tufts University, which stated, "Endowment for financial aid is the highest priority in the university's current *Beyond Boundaries* capital campaign" (2008 response, p. 4). Lehigh University echoed this sentiment, announcing that its current capital campaign had already raised $84 million for endowed student financial aid. "Endowing student scholarships is one of the key goals of the University's current fundraising campaign," the school wrote (2008 response, p. 1). Notre Dame was the only school to explicitly provide a fundraising goal specific to financial aid, identifying undergraduate scholarships as its "largest target goal" (2008 response, p. 1) at $250 million. Baylor, Columbia, Duke, and Princeton also discussed efforts at increasing endowments for

financial aid via ongoing capital campaigns. At the beginning of its capital campaign in 2006, Columbia University launched its new no-loan financial aid policy for low-income students (less than $50,000 in family incomes), which began the following academic year.

While doubtlessly not causal in nature, I found limited evidence suggesting that these capital campaigns may be associated with a positive impact on low-income student access and/or costs at these seven schools by 2014-15. At Baylor University, Pell enrollments increased by just two percentage points (see Table 10), while total institutional grant aid to FTFT undergraduates grew by 100.5% from 2008-09 to 2014-15 (see Table 12). However, this aid was spread among the 96% of FTFT undergraduates who receive institutional aid and the average net price for low-income (less than $30,000 in family income) remained over $28,000 in 2014-15 (see Table 11). On the other hand, Columbia University experienced a seven percentage point increase in Pell enrollment, from 15% to 22%, and average institutional grant grew by over 50%, from $31,215 to $47,043, as cost of attendance grew by only 29.6%. Tufts University had only a one percentage point Pell enrollment over this seven-year period; however, average net price for low-income students declined by 35.1%, from over $9,000 to about $6,000. Finally, Princeton University stated that one of its capital campaign goals in 2008 was to enroll a higher proportion of aided students; during this time, Pell enrollment grew from 10% to 15%, while the proportion of FTFT undergraduates receiving institutional grant aid grew more modestly, from 57% to 59% (see Table 12).

In 2016, seven of the 30 schools again mentioned specific capital campaigns or fundraising initiatives, with many prioritizing student financial aid. Boston University's

"Century Challenge" promotes giving specifically for undergraduate scholarships and offers a one-to-one match for endowed gifts of $100,000 or more, up to $100 million in endowed gifts (2016 response). In a follow-up to its *Beyond Boundaries* campaign, Tufts began its "Financial Aid Initiative," featuring a similar match for gifts of over $100,000. In its 2016 response to Congress, the University indicated that it had raised $64 million for student financial aid (only need-based aid is offered at Tufts) in its first three years.

Acknowledging its "modest endowment compared to peer institutions" (NYU 2016 Response, page 3) which hampers its ability to meet students' full need, New York University's *Momentum Campaign* named scholarship aid as its top priority. The campaign features a goal of raising $1 billion for student financial aid, and as of the 2016 letter, had raised $550 million. Likewise, Yale University's two-year financial aid initiative, *Access Yale*, was committed to raising $250 million in endowment funds to support financial aid for enrolled undergraduate and graduate students. Finally, Notre Dame, the University of Rochester, and Washington and Lee all discussed current or recently concluded campaigns that each featured student financial aid as their top fundraising priority.

Relatedly, the 2016 responses to Congress revealed some evidence that these 30 colleges and universities may be increasingly prioritizing financial aid and scholarships as they solicit new gifts and named donations to their endowments. Endowment spending on financial aid or tuition assistance represented 50% to 52% of all endowment distribution at Rice University from 2012-13 to 2014-15, while 57% to 60% of all new endowments were established for financial aid in those same years (2016 response). In those same years, Duke University saw 40% to 42% of new endowment gifts earmarked

for financial aid, while only 21% of the overall endowment was temporarily or permanently restricted for financial aid (author's calculations, using 2016 response data). Congress also inquired about new named gifts to institutional endowments and their relationship to financial aid; Grinnell was one of many colleges indicating that named gifts for student aid were increasing. While only 26.1% of spending of named funds was restricted for scholarships in 2014-15, the College received $7.5 million in new gifts for named scholarships that same year, representing 79.6% of gifts received for named funds.

Overall, these findings suggest that wealthy private colleges and universities may, in fact, be bolstering their efforts to increase donations for student financial aid and scholarships, whether through capital campaigns, donor matching programs, or named gifts, all dedicated to endowment-building. Several colleges suggested that they had placed a growing emphasis on student financial aid as they solicit new endowment gifts from donors. While some institutions, such as Columbia University, were able to achieve large growth in low-income student enrollments in recent years, average net prices for low-income students still increased at a rate higher than the cost of attendance within this small sample of schools. Baylor University doubled its total institutional aid to FTFE students; however, average net prices remain incredibly high there for low-income students. From 2008 to 2016, targeted capital campaigns may have had a moderate impact on costs and student enrollments and provide some potential for future growth in aid initiatives, but they remain but a small piece of a highly complex student financial aid and access portrait.

CHAPTER 6

DISCUSSION

In this final chapter, I review the present study, beginning with my two research questions and the findings and themes that emerged from my research. I conclude by suggesting areas for future research and discussing implications for policy and practice as institutional leaders, policymakers, and Congress continue to debate the issue of endowment spending and financial aid at wealthy private colleges.

Summary of findings

In response to concerns of access, affordability, potential "endowment hoarding," and subsequent policy proposals, Congress launched two inquiries targeting wealthy private schools in 2008 and 2016. These colleges and universities, with over $500 million and $1 billion in endowments (in 2008 and 2016, respectively) were required to respond to a series of questions regarding endowment growth, spending, student costs, and financial aid. This dissertation explored the nexus of these two requests, focusing on the role of institutional endowments in promoting access to wealthy, private colleges and universities. Two specific research questions framed my analysis. First, how do endowment spending, priorities, and policies differ among private colleges with over $1 billion in institutional assets, given multiple missions and institutional types? Second, how do these schools' endowments contribute to institutional financial aid policy and spending, and ultimately, low-income student access? In particular, I examined this

evolving relationship as institutional policies and approaches to student costs, financial aid, and access may have changed over time. This study sought to further illuminate the current policy debate regarding wealthy institutions and endowment spending, providing a more comprehensive analysis of their spending policies and practices, and ultimately, their impact on student financial aid, net costs, and access.

Wealthy, private schools with burgeoning endowments may seem an attractive target for lawmakers seeking to decrease student costs, increase lower-income student access, and generate additional funding sources for less-resourced institutions. However, this study's findings revealed several critical issues to consider as institutions with endowments ranging from $1.04 billion to over $36 billion as of 2014-15 attempt to manage and fund multiple institutional priorities yet continue to grow their institutional assets in the quests for both long-term sustainability and institutional prestige. Taken as a whole, my findings suggest great heterogeneity in institutional spending and priorities, multiple definitions of student financial need and approaches to distributing financial aid, and consequently, differential roles of the endowment in supporting institutional needs. While there are numerous arguments to be made for a governmental role in imposing greater regulatory controls over endowment spending, advocates must be aware of the risks of imposing one-size-fits-all policy solutions in attempts to compel rich private institutions to spend a greater proportion of their endowment resources.

First, while every school within my study sample listed undergraduate financial aid or student scholarships within its top ten endowment expenditures, most institutions' responses challenged Congress' implicit notion that financial aid should—or could—be the primary endowment priority. While Congress suggested that institutions should be

spending an increased proportion of their endowment payouts on financial aid, or alternatively, drawing more on their endowment to fund student aid, top universities instead claimed to be challenged by a multitude of external and internal pressures preventing them from changing current practices. Whether a small liberal arts college enrolling 1,600 students or a large research university with over 40,000 undergraduate and graduate students, every institution emphasized the unique yet consistent mission-driven priorities supported by endowment revenues. Ranging from research funding, faculty salaries, and instructional support to campus facilities and technology, colleges reported that endowment funds support all facets of campus life and were already stretched to capacity. In effect, sample schools claimed confirmation of Bowen's (1980) hypothesis: they had already committed to spending all of the money that they had raised and had little (if any) room for additional endowment expenditures. Furthermore, even if they had wanted to increase spending in particular areas, most institutions asserted that nearly all of their endowment funds were restricted in use by donors or the board; consequently, their hands were tied.

Second, despite the seemingly massive endowment resources at these 30 institutions (particularly when compared to national averages for private schools), there are staggering differences in institutional financial resources and capacity when viewed in the context of student enrollments, institutional type, and uniqueness of mission. Leaders of many schools would likely argue that schools within this group vary in institutional scale, scope, and/or business models. For example, when endowment assets and capacity are re-ordered by FTE enrollments (see Table 4), smaller, teaching-focused liberal arts colleges such as Pomona, Swarthmore, Williams, and Amherst catapult

upward in rank, while schools enrolling a larger number of students, such as Boston University, New York University, and Syracuse University (all with more than 20,000 undergraduates) fall to the bottom of the list. Leaders at these colleges, particularly Syracuse and NYU—with Pell enrollments in 2014-15 of 25% and 22%, respectively—would likely argue that a difference in scale exists between them and their larger peer schools. Subsequently, efforts to implement a flat tax on endowment earnings, greater endowment spending on financial aid, or five percent (or greater) annual endowment spending requirements would be detrimental to their efforts to use endowment resources as efficiently and equitably as possible to educate a large number of students while also ensuring low-income students can afford to enroll. Alternatively, important differences in business models and missions exist, such as the case at Berea College, which has very little tuition revenue and depends on 68% of its endowment payout to fund student tuition and financial aid in support of its mission of student access and affordability.

Still, this study's examination of annual endowment spending amounts and proportions challenged the notion that colleges could not be spending more, with reported single-year proportions ranging from 2.5% to 5.8% (average of 4.4%) in 2006-07 and 3.1% to 5.7% (average of 4.5%) in 2014-15 (see Table 9). I also observed many schools including endowment management costs in calculations of endowment payouts and associated proportions, raising a critical question of how "endowment spending" is—or should be—precisely defined. Though such liberal applications of "payouts" doubtlessly inflated one-year spending rates, it may be even more important to consider the implications of spending increasing amounts of endowment payouts on management

costs, rather than mission-driven priorities, particularly in years of economic downturn and investment losses.

While endowments exceeded double-digit percentage returns on investments in many of these years, resulting in continued endowment growth, annual endowment spending did not increase in tandem, providing some evidence of so-called "endowment hoarding." In other words, I found evidence to support the "status treadmill effect" described by Cantwell (2015), as institutions continue to amass endowment wealth without spending nearly the same amounts in either the short- or long-run. However, these same colleges and universities reported that endowment spending was constrained by either donors or their boards, limiting their ability to increase funding for student aid or to direct current endowment funds toward financial aid, as they were designated for other purposes. The issue of endowment spending and proportional distributions, whether measured in yearly, three-year, or five-year metrics, seems an area ripe for future policy analysis or governmental challenge, particularly as institutions continue to announce multi-billion dollar capital campaigns and seek large donor gifts, which could presumably be steered toward unrestricted purposes or more specifically for financial aid. There seems to be great potential for "moving the needle" toward increased spending via donor-driven flexibility in future endowment gifts, or alternatively, reduction or removal of temporary or permanent restrictions placed on endowments by university boards.

While there are indeed many schools that are providing much institutional financial aid to the students that they choose to admit to their colleges, whether by meeting full need, offering no-loan policies, or awarding only need-based aid, doubtlessly there remains much room for improvement. Though financial aid remains in the top three

categories of endowment spending at nearly every school, Pell enrollments remain woefully below nationally averages at all but one of the 53 institutions and net prices remain high—and in many cases, insurmountable—for students with lower family incomes. Likewise, low- and middle-income students must first overcome the substantial "sticker shock" that they likely encounter when first deciding *where* to apply, before they can even begin to ascertain what a college education might cost for their family.

Finally, I observed significant differences in how seemingly similar schools, with comparable total endowment values or endowments per FTE, or of similar institutional characteristics, apportioned their funding for student financial aid, operating budgets, and other priorities. This was a particularly notable finding as institutions develop their strategies for spending endowment resources versus saving, as well as the degree to which policymakers may be able to realistically enact change in endowment spending, given the seeming fungibility in institutional "buckets" to fund priorities and needs. Taken together, this study's findings suggest an emergent, yet complex narrative as organizational strategies, financial resources, and associated limitations often countervail stated institutional priorities. While institutional rhetoric, storylines, and marketing reflect commitments to access and affordability for low-income students, in many cases, practical implementation seems effectively lacking.

Directions for future research

This study provided a multifaceted examination of the endowment policies, priorities, and related financial aid spending at some of the most well-endowed private institutions in the country. While this research focused primarily on the 30 schools

willing to make their responses to Congress public in both 2008 and 2016, future research could explore the same topic from a variety of perspectives and methodological approaches. For example, this research might be expanded to include interviews with institutional presidents, vice presidents for admissions and enrollment management, and vice presidents for finance to further explore how institutional strategies shape—and indeed, are shaped by—endowment resources, external pressures, and donor restrictions. Such interviews could be supplemented by a quantitative analysis to explore the impact of variables such as institutional grant aid, admissions policies (e.g., early decision, need blind), and financial aid policies (e.g., need-based only, no-loan, meets full need), and endowment spending rates on outcomes including Pell enrollment and low-income student retention rates at the same group of wealthy schools. In particular, these interviews could be extended to leaders of the other private schools subject to both Congressional requests, yet not included in this study's sample. Given that only a small proportion of students nationally enroll in schools with large endowments, how do these policies and practices vary for lesser-endowed and/or public institutions—and with what impact on student enrollments and outcomes?

Additionally, in the course of my research, I identified several schools that were more successful than their peers in increasing Pell enrollment from 2007-08 to 2014-15 (e.g., Columbia University, Grinnell College), decreased average net price significantly for low-income students (e.g., Washington and Lee University, Tufts University), or kept average net prices below $5,000 in 2014-15 for students with family incomes below $30,000 (Amherst College, Berea College, Princeton University, Stanford University, and Williams College). Future research could explore what organizational conditions or

deliberate strategies precipitated these improvements in access and cost for low-income students, including the endowment's role in providing increased financial aid to students. Such research could identify best practices for other institutions seeking to increase low-income student access, yet ostensibly constrained by endowment restrictions and institutional pressures.

The responses to Congress suggest several other issues ripe for emerging research, yet beyond the scope of this study. In its inquiries, Congress questioned colleges about endowment management and costs (2008 and 2016), fees to investment advisors (2008), and investment office staffing (2016). Evidence from these responses suggests large growth in management costs over time, often included in institutional calculations of endowment payouts, presenting yet another competing spending priority for financial aid and costs. For example, Duke University reported an increase in internal costs of managing its long-term investments from $4.8 million in 1997-98 to $10.26 million in 2006-07 and $11 million in 2014-15, while external costs of managing the same investments increased from $7.23 million to $10.92 million to $27 million over the same time period. Swarthmore, a small college, reported $18.5 million in management fees and costs in 2014-15, while Notre Dame reported $49.3 million in direct management expenses in 2014-15. Topping the scale, Princeton University reported an incredible $320 million in combined external and internal endowment management costs in 2014-15, but also mentioned that performance-based incentives and bonuses for external managers were not included in these amounts. Beyond the enormity of such massive management costs, what are the implications for endowment spending and

student aid, particularly in years when investment returns decline, yet when investors must still be paid?

While describing endowment spending and financial aid policies and practices, many schools also provided examples of contributions that they were making to the local community—both financial and programmatic—despite their tax-exempt status, providing another area for future research. Letters were replete with examples of PILOT payments to local municipalities, schools, health providers, and other organizations, presumably in defense of the colleges' nonprofit benefits. Additional examples of contributions to the community included college readiness, access, and financial aid programs for nearby students, local residents' access to universities' theatre programs, and being "the largest employer in north Berkshire County, where the college's payroll and spending ripple positively through the economy" (Williams College, 2016 response, p. 9). However, past research suggests that the financial impact of PILOT donations do not even approximate the value of property and other tax exemptions that nonprofit colleges receive (Schneider & Klor de Alva, 2016; Schworm & Viser, 2008). This interdependent yet financially debatable relationship between private, nonprofit colleges and their local communities, as well as the impact of such relationships, merits future research.

Implications for policy and practice

In the quest to address such issues while also appeasing constituent concerns, policymakers have offered several policy proposals targeting wealthy higher education institutions. However, any attempts to impose isomorphic policy solutions in the legal or

bureaucratic sense—or alternatively, via Hansmann's (1990) socially imposed pressures—must be approached with caution. Whether considering minimum endowment payout requirements or percentages, taxation on endowment values or investment earnings, or changes to charitable donation policies, policymakers must strike a careful balance between the desire for an efficient, simplified policy lever and the multiple institutional types, missions, goals, student enrollments, and financial resources of private, wealthy schools. For example, within a group of 53 of the most wealthy institutions in the country, undergraduate enrollments range from 1,500 to over 27,000 students, while endowment resources per enrolled student stretch from $67,000 to over $4 million (Syracuse University and Princeton University, respectively; see Table 4).

Consequently, policymakers must first consider the metric through which endowment wealth and spending will be addressed, whether total endowment value, endowment per full-time equivalent undergraduate student, or annual endowment spending proportions. Institutions such as NYU and Boston University would likely argue that they are using their seemingly robust resources to support a larger undergraduate student body, while others maintain—quite compellingly—that any government regulations or intrusions upon their endowment spending represent a real, tangible threat to their missions. Berea College's president, Dr. Larry Shinn, summarized these concerns, arguing that any efforts to regulate its endowment would unquestionably threaten its core educational mission of serving lower-income students from Appalachia:

> Our colleges and universities in the United States are so diverse and complex that any attempt by the federal (or state) government to impose particular spending rates on our endowments could have *deleterious* and *even disastrous impact* on Berea's uncommon mission that provides access and affordability to young people from families in the bottom one

> third of college going students in America. (2008 response, p. 2, emphasis added)

Still, annual endowment spending proportions remain decidedly low in most cases, particularly when compared to the five percent minimums required of other private foundations and charities. In both 2006-07 and 2014-15—before and after the Great Recession—average endowment spending was 4.4% of endowment value, with the median only slightly higher. Requiring annual endowment spending to meet the 5% threshold required of other nonprofits—or even more—might be a first step for policymakers to explore further. Many institutions cited longer-term (e.g., 3-year or 5-year) metrics when assessing endowment spending, most of which exceeded 5% over this time; however, average investment gains far exceeded these proportions, even in the long-term. However, my findings also revealed a fundamental lack of clarity in defining "endowment spending" and associated one-year proportional measures, with many schools including endowment management costs in payout amounts. If Congress is to implement one-year proportional spending minimums for college and university endowments, they must create a precise definition of which costs can be encompassed in such measurements, and in particular, delineate whether ever-increasing endowment management costs may be included.

Relatedly, this study revealed wide variation in how institutions are apportioning their endowment spending, particularly in how they fund annual operating budgets and student financial aid. Even among seemingly similar schools in enrollments and missions, I observed great variation in proportions of endowment dedicated to each institutional priority. Given these differences, it is possible that if Congress were to levy minimum endowment spending requirements on total endowment values or student financial aid, an

"elaborate shell game" could result as institutions simply shuffle around buckets of institutional financial resources. Thus, any attempts to impose a uniform policy solution must be approached with foresight and research, ensuring that the net outcome for low-income student enrollments, net prices, and/or total institutional spending on financial aid—regardless of the source—does not simply break even.

While sticker prices doubtlessly present an initial barrier to low-income student access, additional obstacles to enrollment remain at schools in my sample, suggesting important considerations for institutional leaders and practitioners. For example, for low-income students who applied and were admitted to schools, average net prices remained considerably high in many cases. Despite various combinations of policies including need-blind, no-loan, and meeting full need, Pell enrollments remained considerably below national averages. As a first step, institutions could consider eliminating merit-based financial aid and redirecting these funds to students with financial need. Baylor University, with the highest average net price for low-income students in my sample (over $28,000), engages in widespread tuition discounting, awarding aid to 96% of its first-year students and including academic merit as a component of aid packages. Similarly, colleges might consider capitalizing on donor gifts and institutional priorities to take bold steps toward providing fully-funded financial aid awards to Pell-eligible students. Boston University, with one of the higher average net prices for low-income students in this study—and only 13% Pell enrollment in 2014-15—recently announced that it would eliminate all loans for Pell recipients, beginning with the Class of 2021 (Lederman, 2017). Capitalizing on a trustee gift, presidential support, and a sizeable long-

term endowment commitment, Pell enrollment for the university's first-year class increased from 14.6% in Fall 2016 to 18.2% in Fall 2017 (Lederman, 2017).

Relatedly, college leaders could consider how fundraising, donor cultivation, and capital campaign strategies might be reframed to enable low-income student access and better support financial aid. Most universities maintain that endowment funds are inextricably intertwined with donor regulations and restrictions, representing yet another barrier to increased endowment spending. However, Hansmann (1990) argues that institutions can shape and influence donor preferences and gifts, so as to reduce restrictions and permit greater discretion in spending. Additionally, he suggests that universities may have more discretion in endowment spending than they are willing to admit, whether due to board-imposed restrictions or other accounting rules:

> Moreover, universities can influence, through their solicitation practices, the extent to which their gift income is restricted to endowment. And, through their accounting practices and spending rules, universities can determine, within relatively broad bounds, whether income on endowed funds accumulates or is spent currently. Thus a substantial portion of endowed funds have been accumulated by institutional discretion and not donor command. (Hansmann, 1990, p. 8)

Indeed, a June 2017 announcement from MIT heralded an unrestricted $140 million gift from an anonymous donor claiming that they had benefitted from the university's financial aid in the past (MIT News, 2017). A rarity for gifts of its size, MIT announced that the donation will support multiple areas of the university, including innovative thinking, technology and laboratory equipment, faculty and student recruitment, and student financial aid. "Crucially, unrestricted support also helps MIT maintain its ongoing commitment to robust financial aid and priorities at the Institute's core," the college stated (MIT News, 2017, para. 4). Similarly, institutional leadership should

consider how capital campaigns and priorities could be further tailored to encourage gifts supporting need-based aid and the recruitment, enrollment, and retention of lower-income students. Boards might also consider reducing the number of restrictions that they place on endowment funds not restricted by donors, enabling greater flexibility for short- or long-term financial aid and access initiatives.

Finally, while not addressed specifically in this study, a critical lynchpin remains: the practices that admissions offices engage in to recruit, admit, and enroll lower-income students. Private institutions doubtlessly have more autonomy than public institutions in deciding how and where to recruit underrepresented populations, what metrics to apply when admitting students, and how much financial aid to provide when encouraging admitted students to enroll. It is also important for these institutions to consider how longstanding admissions policies, such as early action or early decision, allow them to shape their classes by admitting higher-income students. If wealthy colleges and universities wanted to increase their low-income student enrollments, there is little doubt that many elite schools (though not all) could alter their admissions criteria to encourage more to enroll. Given the yield statistics referenced in Table 7, which suggest high yield rates at many of these institutions, it is likely that incremental moves to admit more low-income students—backed by generous financial aid policies and packages—could result in gradual increases in their enrollment.

Still, scrutiny of higher education continues to grow as the public becomes increasingly dissatisfied with rising costs, lawmakers remain divided across party lines regarding financial support for postsecondary education, and public officials continue to decry non-vocational majors and liberal arts fields. Systemic inequalities remain as low-

income communities are excluded from quality secondary education, resulting in insurmountable gaps in college readiness, information, and subsequent access. What exactly are the obligations of wealthy private institutions to help overcome these criticisms and gaps? What *should* they be doing, given the multiple priorities and constituent groups that they are already trying to serve? What is the precise balance between institutional autonomy and the role of Bowen's "socially imposed pressures" and governmental obligations to intervene?

Cantwell (2015) suggests the need for "creativity, imagination, determination, and favorable circumstances" (p. 190) to disentangle the complex questions shaping stratification and reproduction, while Bowen (1980), writing nearly four decades earlier, argued for institutional accountability in leading this process:

> Affluence does confer upon colleges and universities heavy responsibilities to use their educational resources efficiently in the broad social interest and not waste them through slackness, in quest of institutional vanity, or by trying to provide a needlessly high standard of institutional living. The dilemma of the rich institutions is that the relationship between resources and educational outcomes is at best uncertain. (p. 248)

In the meantime—absent powerful social pressures or governmental legislation—enacting meaningful change at some of the wealthiest and most privileged postsecondary schools in the country will likely require a distinct combination of both Cantwell's and Bowen's advice: creativity and imagination, coupled with institutional determination, ownership, and commitment to increasing student aid, affordability, and access.

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APPENDIX A

2008 BAUCUS-GRASSLEY LETTER

Dear

A top concern for Americans, and for Congress, is the rising cost of higher education. Congress has long looked to tax breaks, targeted spending, and loan programs to help families and students meet the burden of saving and paying for college. The results have provided some benefits but haven't resolved the problem of low and middle income students and families will face ever-higher tuition costs. We are interested in approaches that universities and colleges can adopt to address this problem.

It seems clear from recent actions by our nation's top universities that there is much that can be accomplished by colleges and universities, particularly those with significant endowments, to control costs and provide real relief for students from low and middle income families. In fact, many colleges and universities are now focused on controlling rising tuition costs and assisting low and middle income families. These efforts, by several of the nation's top universities, are already having a broad positive effect throughout the university community. This is a very positive trend that we'd like to see continue.

We would appreciate additional information about tuition costs and your institution's endowment. University endowments receive very generous tax breaks under the Internal Revenue Code. We want to better understand how these tax benefits for higher education endowments are improving education and making undergraduate studies more affordable for low and middle income families today.

The newspapers have been filled with stories of a few universities taking steps to increase endowment spending and provide free tuition for low-income families and greatly reduced tuition for middle-income families. This has been the first good news in a long time for families struggling with the burden of ever-increasing tuition. These actions have given hope to many that a top education is possible without having to take on crippling debt.

We are also pleased about steps that some universities are taking to exercise increased transparency in defining the actual amount of financial assistance a student will receive and the actual cost a family will have to pay for tuition, fees, room and board – for example, by providing an online calculator. Too often, colleges and universities do not provide enough information to students and families. Families and students need to have greater certainty regarding the costs of education so they can better assess their education options.

The recent release of figures from the National Association of College and University Business Officers (NACUBO) makes it clear that institutions with endowments over $500 million dollars a year are seeing very significant growth – and have been for many years. That is good news because much good can be done now. We hope that these strong returns will encourage you and your Board of Trustees to review your endowment payout policy and ensure that it reflects best practices.

To assist the Senate Finance Committee in better understanding this area, we request your response to the following questions:

1) Please provide the number of undergraduate and graduate students year-by-year for the last ten years.

2) Please provide the total cost of undergraduate tuition (including all fees) -- both sticker and average, mean and median -- year-by-year for the last ten years. Please provide the amount of tuition assistance (not including loans or work study) that the university has provided to undergraduate students year-by-year for the last ten years. For the most recent year, please provide the percentage of students receiving university grants (for example 25%; 50%; 75% and 100% of tuition and fees). Please provide the average grant amount.

3) Please explain your university's financial aid policy. How do you inform students and parents of that policy? What outreach efforts does your university take to recruit potential low-income students? How is low-income defined? What is the amount spent on these efforts?

4) Who determines and decides when tuition increases are necessary? What is the process for making this decision? Does the full Board of Trustees vote on tuition increases? Are students, parents and the public provided an opportunity to comment on tuition increases prior to final decisions being made? What role does your university endowment play in providing financial assistance to students?

5) Please explain how your university's endowment is managed and the role of the Board of Directors? What are your university's endowment payout and investment policies? What is the mission of your university's endowment? When was the last time that the university's endowment policy was reviewed? When will it next be reviewed?

6) Please provide the year-by-year net growth of the university's endowment for the last ten years (in both percentage and dollars). What is the amount of donations the endowment has received year-by-year for the last ten years? Please provide the percentage of investment in each asset class (equity, fixed income, hedge funds, private equity, venture capital, etc.) and the amount invested outside the United States

7) Please explain how you determine what is considered part of the university endowment. In other words, how is your endowment defined? Are there any other long term investments that are not included in the endowment as reported to NACUBO? If so, what are they and what are their values?

8) What has been the cost of management of the endowment year-by-year for the last ten years?

9) What was the payout (both in dollars and percentage) from the endowment year-by-year for the last ten years? What is the targeted payout (in percentage) from the endowment year-by-year for the last ten years? If either the actual and/or targeted payout is below 5%, please explain how this meets the needs of the current student body. If there is a material variation between actual and targeted, please explain. What were the top 10 major expenditures from the endowment last year?

10) How much of the endowment is subject to permanent spending restrictions or limitations set by the original donor? Of the portion subject to permanent limitations, what percentage is restricted for need-based scholarships? What portion is restricted for undergraduate financial aid? Please provide the top five types of restrictions on the endowment by category. What percentage of the endowment is subject to significant limitations placed on it due to a decision by the board (or a subcommittee of the board) or a college or university official – such as a set-aside for a specific program? Please provide the investment return to the endowment year-by-year for the last ten years.

11) Please explain the fee arrangement to investment advisors. How is the fee and compensation measured and determined? What is the process to review reasonableness of the fee and compensation and what comparables are used? Who reviews and approves the fee? Who pays the fee (the endowment, general funds)? Please explain what relationship, if any, exists between endowment size and/or growth and the compensation given to the college or university president and the endowment manager. Please list what endowment-related bonuses, if any, either the college or university president or the investment manager has received year-by-year for the last ten years.

In advance, we appreciate your time and consideration in responding to these questions. Your responses will help us better understand this area and inform our deliberations as we consider potential policies. We encourage you to contact the Finance Committee staff so we can work with you on your response and ensure that it is not unduly burdensome. We envision that many or most of the answers can be answered in brief – a page or less. Please respond within thirty days. Thank you.

Sincerely,

Max Baucus
Chairman

Chuck Grassley
Ranking Member

APPENDIX B

2016 CONGRESSIONAL ENDOWMENT REQUEST LETTER

Congress of the United States
Washington, DC 20515

February 8, 2016

Dr. Steven Knapp
President
George Washington University
2121 I Street NW
Washington, D.C. 20052

Dear President Knapp,

In the United States Congress, the Senate Committee on Finance and House Committee on Ways and Means have exclusive jurisdiction over federal revenue measures. Under Senate and House rules, the committees have corresponding authority to conduct oversight of activities within their jurisdiction. As chairmen of these committees and the Ways and Means Oversight Subcommittee, we are conducting an inquiry into the activities of colleges and universities related to the numerous tax preferences they enjoy under the Internal Revenue Code. We write to request information regarding the operations of George Washington University and status of the university's endowment.

The National Association of College and University Business Officers reports that 56 private universities and colleges have endowments of more than $1 billion.[1] This study showed endowments had an average return on investment of 15.5 percent and an average payout rate of 4.4 percent during the 2014 fiscal year. Despite these large and growing endowments, many colleges and universities have raised tuition far in excess of inflation.[2]

In recent years, a greater amount of information has been made publicly available about endowments. The Internal Revenue Service revised the Form 990, which tax-exempt private colleges and universities are required to file, to include certain high-level information about endowments. The Committees are conducting additional oversight of how colleges and universities are using endowment assets to fulfill their charitable and educational purposes. To help the Committees understand this issue, **please answer each question below for the past three tax years, and, to the extent possible, for the current tax year**, unless otherwise specified.

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[1] *Building on 11.7% gain in FY2013, educational endowments' investment returns averaged 15.5% in FY2014*, NACUBO (Jan. 29, 2015), *available at* http://www.nacubo.org/About_NACUBO/Press_Room/2014_NACUBO-Commonfund_Study_of_Endowments_%28Final_Data%29.html.

[2] John W. Schoen, *Why does a college degree cost so much?*, CNBC, June 16, 2015, *available at* http://www.cnbc.com/2015/06/16/why-college-costs-are-so-high-and-rising.html (breaking down the tuition costs of public and private two and four year colleges and universities from 1994 to 2015 compared to inflation).

Endowment Management

1. What categories of assets are included in your college or university's endowment? For each category, please indicate the amount of funds that are:

    a. unrestricted;
    b. permanently restricted by donors;
    c. temporarily restricted by donors;
    d. permanently restricted by your college or university (quasi-endowments); and
    e. temporarily restricted by your college or university.
    f. For each restricted asset, please describe the uses for which the funds are restricted and the amount of the fair market value of the endowment apportioned to each use. How and why were the restrictions put into place?

2. Does your college or university hold any investments that are not included in the endowment? If so, what are they, and what are their fair market values and basis? How are they used to further the educational purpose of the college or university?

3. What is your endowment size, as measured by total fair market value of its assets? What has been the net growth and net investment return on your endowment each year?

4. How much has your college or university spent each year to manage the endowment, and how many staff and contractors are employed to manage the endowment? For any fees paid to nonemployees for investment advice, asset management, or otherwise, please provide detail on the amounts paid, to whom, and the fee arrangement.

5. If your endowment is required to file a Form 990 separately from your college or university's Form 990, please provide the endowment entity name(s) and Employment Identification Number.

Endowment Spending and Use

6. How does your college or university determine what percentage of the endowment will be paid out each year? If any, what has been the target endowment payout as a percentage of the endowment's beginning balance each year? If that answer differs from the percentage paid out, please explain why. Please attach any payout policies or guidance.

7. Does your college or university have policies regarding spending the endowment principal? Has your college or university ever spent endowment principal? If so, under what circumstances?

8. How much and what percentage of the endowment's beginning balance has your college or university spent each year? How much and what percentage of the endowment's return on investment has your college or university spent each year?

9. What percentage of your endowment does your college or university devote to financial aid for student tuition? How much for other forms of student financial aid? Please specify the types of non-tuition financial aid provided.

10. Does your college or university have policies regarding whether it is allowed to accept funds restricted to a specific purpose? Has your college or university ever declined a donation because it was restricted to a certain purpose? If so, please describe those specific scenarios in which your school rejected a donation.

11. How much and what percentage of your college or university's endowment is invested in real property (not including REITs or other publicly-traded securities)? Please list and describe your college or university's real estate holdings, including real estate held by the college or university, the endowment, and all related entities. If the college or university has made any Payments in Lieu of Taxes, please provide the date and amount of the payment.

Donations

12. Does your college or university grant naming rights to donors based on certain donation levels? If so, please describe the naming rights program, including how much and what percentage of any naming rights donations your college or university has used for tuition assistance.

Conflicts of Interest

13. What conflict of interest policies does your college or university have in place to address financial interest in endowment investments (including potential conflicts of interest among and between governing boards, trustees, executives, internal employees tasked with overseeing the endowment, and external asset managers of endowment assets)? How do you vet board members' potential conflicts of interest? What are your policies if a conflict arises with a member of the board of trustees?

Please respond to this request by April 1, 2016. Thank you for your assistance with th inquiry. If you have any questions, please contact Chris Armstrong or Justin Coon wi the Senate Committee on Finance at (202) 224-4515 or Amanda Neely with the House Committee on Ways and Means at (202) 225-9263.

Sincerely,

ORRIN G. HATCH
Chairman
Senate Committee on Finance

KEVIN BRADY
Chairman
House Committee on Ways and Means

PETER J. ROSKAM
Chairman
House Committee on Ways and Means
Oversight Subcommittee

APPENDIX C

RESEARCHER'S REQUEST TO COLLEGES FOR 2008 RESPONSE TO SENATE ENDOWMENT INQUIRY

Dear (recipient),

I am a doctoral candidate at the Institute of Higher Education at the University of Georgia. My dissertation focuses on college and university endowments. I write today requesting specific information prepared and submitted by Middlebury in response to a call from the United States Congress. I am hoping that you may be able to help with my request, or direct me to the appropriate contact at your institution.

As you may be aware, in spring of this year (2016) the US Senate Committee on Finance and House Committee on Ways and Means requested written responses from 56 private schools regarding their endowment operations and management. Many institutions posted these responses publicly, and I was able to locate Middlebury's response online. However, I am seeking additional information from a similar Senate request in 2008, which is critical for my dissertation research.

In 2008, Senators Max Baucus and Chuck Grassley wrote to 136 colleges and universities seeking information on endowment growth and spending on student aid. I am collecting these responses in order to compare them to the most recent responses. More information about this Senate request can be found at http://www.finance.senate.gov/release/baucus-grassley-write-to-136-colleges-seek-details-of-endowment-pay-outs-student-aid

As I am unable to locate Middlebury's previous response online, I am hopeful that you may be able to provide a copy of the 2008 Senate request response, or alternatively, direct me to the appropriate contact person at your institution.

- **To summarize, I am seeking Middlebury's written response to Senators Max Baucus and Chuck Grassley's 2008 request on endowment growth and spending.**

I offer my sincere gratitude for your consideration and assistance on my dissertation research. I look forward to your response, and welcome any questions via email (ebciar@uga.edu) or phone (XXX-XXX-XXXX).

Sincerely,
Erin Ciarimboli

APPENDIX D

RESEARCHER'S REQUEST TO COLLEGES FOR 2016 RESPONSE TO SENATE ENDOWMENT INQUIRY

Dear (recipient),

I am a doctoral candidate at the Institute of Higher Education at the University of Georgia. My dissertation focuses on college and university endowments. I write today requesting specific information prepared and submitted by Middlebury in response to a call from the United States Congress. I am hoping that you may be able to help with my request, or direct me to the appropriate contact at your institution.

As you may be aware, in spring of this year (2016) the US Senate Committee on Finance and House Committee on Ways and Means requested written responses from 56 private schools regarding their endowment operations and management. Many institutions posted these responses publicly on their websites; however, I was unable to locate Middlebury's response online, which is critical for my dissertation research. More information regarding the 2016 Congressional request can be found at http://waysandmeans.house.gov/endowment-letters/

As I am unable to locate Middlebury's response, online I am hopeful that you may be able to provide a copy of the 2016 Congressional request response, or alternatively, direct me to the appropriate contact person at your institution.

- **To summarize, I am seeking Middlebury's written response to the 2016 US Senate Committee on Finance and House Committee on Ways and Means request for information on endowments.**

I offer my sincere gratitude for your consideration and assistance on my dissertation research. I look forward to your response, and welcome any questions via email (ebciar@uga.edu) or phone (XXX-XXX-XXXX).

Sincerely,
Erin Ciarimboli

APPENDIX E

RESEARCHER'S REQUEST TO COLLEGES FOR 2008 AND 2016 RESPONSES TO SENATE ENDOWMENT INQUIRIES

Dear (recipient)

I am a doctoral candidate at the Institute of Higher Education at the University of Georgia. My dissertation focuses on college and university endowments. I write today requesting specific information prepared and submitted by Middlebury in response to a call from the United States Senate and House of Representatives. I am hoping that you may be able to help with my request, or direct me to the appropriate contact at your institution.

As you may be aware, in spring of this year (2016) the US Senate Committee on Finance and House Committee on Ways and Means requested written responses from 56 private schools regarding their endowment operations and management. Many institutions posted these responses publicly; however, I was unable to locate Middlebury's response. I am writing your office in hopes of obtaining a copy of Middlebury's 2016 response to Congress, which is critical for my dissertation research. More information regarding the 2016 Congressional request can be found at http://waysandmeans.house.gov/endowment-letters/

Additionally, in 2008, Senators Max Baucus and Chuck Grassley wrote to 136 colleges and universities seeking similar information on endowment growth and spending on student aid. I am also collecting these responses in order to compare them to colleges' 2016 responses. Again, while I found many schools' responses online, I was unable to locate Middlebury's. More information about this Senate request can be found at http://www.finance.senate.gov/release/baucus-grassley-write-to-136-colleges-seek-details-of-endowment-pay-outs-student-aid

As I am unable to locate Middlebury's responses to both requests online, I am hopeful that you may be able to provide a copy of the 2008 and 2016 responses, or alternatively, direct me to the appropriate contact person at your institution.

To summarize, I am seeking:

- **Middlebury's written response to the 2016 US Senate Committee on Finance and House Committee on Ways and Means request for information on endowments**
- **Middlebury's written response to Senators Max Baucus and Chuck Grassley's 2008 request on endowment growth and spending.**

I offer my sincere gratitude for your consideration and assistance on my dissertation research. I look forward to your response, and welcome any questions via email (ebciar@uga.edu) or phone (XXX-XXX-XXXX).

Sincerely,
Erin Ciarimboli

APPENDIX F

DATA CODING MANUAL FOR 2008 AND 2016 RESPONSES TO CONGRESS

Parent Code	Child Codes	Notes/Descriptors
Competing Priorities for Endowment Funds		Includes other rising institutional costs, often in competing or contentious context
Endowment Characteristics		Endowment size; Defining the endowment; Endowment Return on Investment; Endowment Growth
	Donations, Growth, Return	
	Endowment and Operating Budget	Mentions of amount or proportion of operating budget funded by endowment
	Mission and Priorities	Endowment mission; Endowment's relation to educational goals; Endowment's relation to college and university purposes; Major expenditures of endowment; Other projects and activities supported by the endowment
	Payouts/Spending	How determined; Who sets them; Average amounts of payouts and spending; Average percent of endowment paid out each year; Target endowment spending; Endowment spending policies
	Restrictions and Limitations	Donor restrictions on spending ; Types of restrictions; Amount of restrictions; Percent of endowment that is restricted; Board's relationship to restrictions; Donations specifically to student financial aid (overlaps with FA category); Why institutions are not spending more
Endowment-Financial Aid Relationship		Specific mentions of how the endowment and financial aid policy or spending are connected
Financial Aid and Related Policy		Overall/Broad Institutional Policy (e.g., need-blind, meets full need, etc.)
	Educating Stakeholders on Financial Aid Policy	
	External Scholarships and Aid	
	Financial Aid Statistics	Tuition assistance/grants (amount and percent); Percent of students receiving financial aid; Percent of endowment dedicated to financial aid or tuition; Average grant amount; Other forms of student financial aid
	Fundraising and Capital Campaigns	
	International Students and Financial Aid	
	Student Loans	
	Mission of University Financial Aid	
	Scholarships (merit-based or need-based)	
	Treatment of Income and Assets	

APPENDIX F CONTINUED

Parent Code	Child Codes	Notes/Descriptors
Intergenerational Component/Goals of Endowment		
Great Recession's Impact		2016 letters/responses only; specific references to impact of Recession
Low-Income Students		Endowment spending on low-income students; L-I student net price; Recruitment of L-I students; Defining L-I students; Amount spent on these efforts
	Amount Spent on Programs and Recruitment Efforts	
	Defining Low-Income	
	Specific Programs, Recruitment, and Outreach	
Tuition and Fees/Cost of Attendance		Sticker and average price; Mean, median; Net price
	Tuition-Setting/Policy	Tuition increases; Trustee role in setting costs/tuition increases; Justification for these increases