

Most College Cost Fixes Miss the Root Problem

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Chairman Roskam, members of the subcommittee, thank you for inviting me to speak with you today. My name is Neal McCluskey and I am the director of the Center for Educational Freedom at the Cato Institute, a nonprofit, non-partisan public policy research organization. My comments are my own, and do not represent any position of the institute.

Introduction

I have been asked to provide something of an overview of the nation’s college cost problem—sometimes referred to as a “crisis,” “conundrum,” or other such phraseology—especially possible explanations for it and, as a result, some insight into possible solutions. I should note upfront that numerous variables affect college prices, and there is no single explanation for college prices nor a single solution to the college cost problem. We live, as social scientists like to say, in a “multivariate world.”

Where We Stand

First, a quick overview of where we stand, and why many people believe we are in the midst of a college cost “crisis.” At the most basic level, the country has seen an essentially unremitting increase in college prices for about the last 35 years. According to data from the federal *Digest of Education Statistics*, the inflation-adjusted “sticker price” of tuition, fees, room and board rose 151 percent, from \$8,473 to \$21,728, between 1980 and 2014. Tuition and fees alone rose from \$3,521 to \$11,487, a 226 percent leap.¹ These are very high inflation rates that have greatly exceeded increases in household income, and even the notoriously inflation-prone healthcare sector. Economist Mark Perry estimates that between 1978 and 2011 the annual increase in tuition and fees has been 7.45 percent, versus 5.8 percent for medical care and 3.8 for all items included in the Consumer Price Index.²

A consequence—or perhaps a cause—of this has been greatly increasing student debt, which has especially grabbed the attention of the country over the last few years due, I think, to three things in particular: (1) In 2010, total student loan debt held by Americans surpassed total credit card debt for the first time. (2) In 2011, a major concern of the Occupy Wall Street movement was college cost and debt. (3) In 2012, total student debt surpassed the psychologically powerful \$1 trillion mark. We have also seen significant increases in debt per student and student loan default rates in recent years, with inflation-adjusted amounts owed by students graduating with debt rising from about \$14,400 in 1993 to more than \$35,000 in 2015, and 2-year cohort default rates rising from 4.5 percent for those entering repayment in 2003, to 10 percent for those entering repayment in 2011.³ (The Department of Education started using a 3-year default rate in 2012, which looked at students entering repayment in 2009). The percentage of bachelor's degree recipients graduating with loans grew from about 46 percent in 1993 to 71 percent in 2015.⁴

Why has the price of college risen so remarkably over the last roughly 35 years?

There are three common explanations, all of which can—and probably do—offer important insights into the problem. But one basic reality—colleges and students typically want to get as much “stuff” as possible—underlies the problem.

“Cost Disease”

The first major explanation for skyrocketing college costs is connected to “cost disease.” Cost disease refers to a theory put forth by economists William Baumol and William Bowen postulating that industries reliant on labor will tend to see their costs rise because they cannot easily replace labor with technology, but their workers need to get paid more lest they go to work in areas where more pay—enabled by greater productivity—is available. Their famous example was the performing arts. If you want to put on a concert to perform Beethoven, you need the same number of players as in Beethoven's day.⁵

There is a problem with the theory: While putting on a live performance may require basically the same inputs and can only reach basically the same number of ears as in Beethoven's era, getting music to people has become infinitely easier with records, tapes, CDs, and now the Internet. Technology has, in fact, massively increased the productivity of the music industry.

Robert Archibald and David Feldman, economists at the College of William and Mary, have recently argued that the “cost disease” likely explains much of rising college prices.⁶ Colleges are staffed with a lot of people with high education and skill levels, and they, seemingly like members of an orchestra, cannot be easily replaced with technology to increase productivity. So colleges have to spend more just to keep remuneration on pace with other industries.

But like musicians, professors can be replaced with technology, or at least the reach of any given professor can be hugely expanded, via the Internet especially. Archibald and Feldman do see some room for productivity improvements via online instruction, but mainly in broad, introductory courses. In other areas they believe the blow to quality would be too great.

A major problem is that we have no clear measure of “quality” in higher education. So anything that appears to increase class sizes, or decrease discussion time, or prevent professors from purchasing the latest technology, can be said to hurt quality. But there is very little empirically compelling evidence that, for instance, students learn more in a seminar with 5 students or 25 students, or are better employees because their school doubled the number of free weights in the gym.

What we have seen as costs have ballooned, in fact, suggests lower quality, not better. For instance, time spent studying declined from about 20 hours per week in 1981 to 13 hours in 2003, according to researchers Richard Arum and Josipa Roksa.⁷ Arum and Roksa also found that the average college student saw only small increases in “critical thinking, complex reasoning, and writing skills” in her first two years of college, and 45 percent experienced no increase at all.⁸ According to the National Assessment of Adult Literacy, in 1992 about 40 percent of adults whose highest degree was a bachelor’s were proficient in reading prose, but by 2003—the only other year the assessment was administered—only 31 percent were. Among people with advanced degrees, prose proficiency dropped from 51 percent to 41 percent.⁹

Rather than seeing increasing, or at least steady, productivity accompanying big price increases, the available evidence—which is certainly imperfect—suggests there may well have been productivity losses.

State and Local Funding

Perhaps the money coming through tuition, fee, room and board charges is simply making up—or not even making up—for lost revenue elsewhere. The second major explanation often given for why college has gotten so much more expensive is based on this, in particular cuts to direct state support for colleges and universities. Colleges may have raised their prices just to hold steady.

There is likely some truth to this. Data collected by the State Higher Education Executive Officers show that over the last 25 years there have been substantial decreases in inflation-adjusted, per-pupil state and local appropriations to public colleges and universities. In 1990 state and local governments appropriated \$8,688 per full-time equivalent student, which dropped to \$6,966 in 2015.¹⁰ It was not, though, a straight drop—expenditures rose and fell like a rollercoaster as enrollment and state revenues dipped and ascended. Indeed, the record for the period was roughly in its middle: \$9,120 in 2001.

Have state and local governments cut total appropriations, as the per-pupil data might suggest? No. Total inflation-adjusted appropriations rose between 1990 and 2015, from \$67.5 billion to \$77.6 billion. Again, they did not move in a straight line—they peaked at \$84.3 billion in 2008 and bottomed out at \$63.1 billion in 1993—but the appropriations clearly grew. What mainly explains the per-pupil drop is increases in enrollment, from 7.8 million full-time equivalent students in 1990 to 11.1 million in 2015.

State and local governments haven’t gotten more penurious, but appropriations have fallen on a per-pupil basis. When per-pupil appropriations are compared to per-student public college

revenue through tuition and fees, we can begin to get an idea of the extent to which schools might be raising prices just to make up for lost state and local revenue. I have done this using SHEEO data for a forthcoming paper, and have found that for the large majority of states tuition and fees appear to do much more than make up for lost appropriations. Using smoothed trend lines for data between 1990 and 2015, the average correlation per state between per-pupil appropriations and tuition-and-fee revenue is -0.53, suggesting that for every 53 cents lost in appropriations, the average state's schools brought in \$1 through tuition and fees.

Breaking this down a bit, only 11 states saw a net loss per-pupil, for an average of -\$31 per full-time equivalent student per year. 6 states experienced both increases in appropriations and tuition-and-fee revenue, averaging +\$169 per student per year. 31 states saw tuition-and-fee revenue increases more than make up for dropping appropriations, netting +\$63 per student, per year. Finally, only 2 states saw appropriations rise and tuition-and-fee revenue drop, for a net gain of \$83 per student, per year.

Most public colleges did more than keep their heads above water on a per-pupil basis. And in the aggregate, when looking at total revenue through appropriations and tuition and fees, public institutions in every state experienced sizeable increases in income, typically in the tens-of-millions annually. It should also be noted that the inflation adjustment SHEEO uses—the Higher Education Cost Adjustment—is heavily weighted to account for labor costs for white collar workers, meaning it likely largely accounts for “cost disease.”

What one observes looking at tuition-and-fee and appropriation trend lines is that the tuition-and-fee lines are appreciably smoother than appropriations. This suggests that much of price changes is not about making up for lost appropriations, but that prices may be largely on “automatic pilot”—raised in part because they are always expected to rise. Further hurting the state-funding explanation for college prices is that the prices of private institutions—which do not typically receive much by way of direct state or local appropriations—have also seen major price increases, though somewhat smaller than public four-year institutions.

“Bennett Hypothesis”

This brings us to the last major explanation for ballooning prices: that student aid—especially from the federal government—enables colleges to raise their prices. This was put forth most famously by then-U.S. Secretary of Education William J. Bennett in a 1987 *New York Times* op-ed under the title “Our Greedy Colleges.” In that piece Bennett asserted that “federal student aid policies do not cause college price inflation, but there is little doubt that they help make it possible.”¹¹ Essentially, colleges can raise their prices because student aid enables students to pay them.

This makes intuitive sense: If I had been buying a hot dog from a vendor for a dollar, and hot dogs were basically the only available food stuffs, then someone gave me a dollar and, in earshot of my vendor and all other vendors, told me I had to use it for a hot dog, my vendor and all the other vendors would have strong incentives to raise their prices. I would be no worse off and they would be better off. Then, if the hot dog benefactor kept upping my allowance to keep up with rising prices, a price spiral would ensue. That seems a rational explanation for what is

basically happening in college pricing, though the forms of aid vary from grants—the “free” dollar—to borrower-friendly loans, tax incentives, and work study, all of which would be expected to have somewhat different impacts.

Proving that the hypothesis is correct is difficult, in part because non-profit colleges—which are most colleges—call everything they spend “costs,” making it hard to assess to what extent necessary expenditures are driving prices, or “costs” are just what colleges call all the money they bring in and then spend. Increasingly, however, empirical research is being done on this, using such techniques as analyzing price changes after increases or decreases in per-borrower loan maximums. I have identified 13 such studies that have found that student aid leads to increases in prices, or decreases in aid from schools, or other effects which reduce the value of the aid to the student.¹² That federal student aid is often used to substitute for other funding may also help to explain state spending: state legislators may limit their own higher education spending if they believe student aid will allow students to make up for it. At least one study has found some evidence of this.¹³

There is another side to this: student demand. Colleges will sometimes argue, as Archibald and Feldman do, that they have little choice but to supply nice but costly amenities such as deluxe dormitories and elaborate recreation facilities, including a few on-campus waterparks.¹⁴ They have to supply them because students demand them. There is research supporting this, finding that students tend to highly value “consumption amenities,” while only top academic performers value academic quality.¹⁵ Of course such amenities must be paid for, and aid enables that payment to occur.

The Root Cause

Ultimately, schools do not have to pay professors more, or hire as many administrators, or raise prices. They could choose not to grow as fast, or to even make cuts. What ultimately drives all of this is that colleges, and the people in them, are normal human beings who feel there is always something useful they can do with more money. This is the basis for “Bowen’s Law”—named after former Grinnell College and University of Iowa president Howard Bowen—which postulates, essentially, that in pursuit of prestige and other goods, colleges will grab every dollar they can.

This appears to be somewhat tempered in public institutions, as policymakers have a say in prices and will sometimes react when prices rise too high, too fast. But they also want their state institutions—especially flagships universities—to be competitive, and so face strong incentives, driven by the entire higher education market and demands of their constituencies, to have competitive amenities, programs, and prestige, all of which require money.

Cost disease and declining per-pupil state and local subsidies no doubt play parts in rampant price escalations. To a large extent, though, it appears to be student aid that enables the prices to rise so quickly; indeed, the aid likely increases institutions’ need for more money as students who are using third-party money demand nicer things. And all of it is grounded in a basic reality: people in colleges, like everyone else, can always think of things they’d find valuable to do with more money.

Possible Solutions

Ordinarily, the check on prices is having to get people to part with their money and pay them. The major problem in higher education is that much of the price schools charge is paid with other people's money, reducing incentives to demand only what is essential. Part of this, importantly, is institutional aid—money that comes from schools to discount tuition. A great deal of it, though, is aid to students largely through the federal government. To get a sense for the scope and growth of aid, according to the *Digest of Education Statistics*, in the 1992-93 academic year 45 percent of full-time, full-year undergraduates received some sort of federal aid. By 1999-00 that had risen to 56.7 percent, and by 2011-12—the last year with available data—it had hit 72.8 percent.¹⁶ The *Digest* does not have aid amounts prior to 1999-00, but between that year and 2011-12 the average, inflation-adjusted amount of federal aid received per recipient rose from \$8,280 to \$11,170.¹⁷

Student aid is a mix of grants, loans, and work study, which are different in appreciable ways: grants such as Pell need not be repaid—they are “free” money—while loans are supposed to be repaid (though there are a number of programs that can mitigate that). Work study is money in exchange, of course, for work. In addition to these types of aid are tax-incentivized aid such as 529 plans and Lifetime Learning Credits. Not incorporated in the *Digest* numbers, the nonprofit College Board estimates that education tax benefits used for undergraduate education rose from zero dollars in 1996-97 to \$15.2 billion in 2014-15.¹⁸

The ultimate solution to the rampant college price problem—and to bring higher education in line with all the other things on which people might spend money—is to phase out federal aid, which artificially puts a thumb on the scale to consume higher education. It should not be done overnight—families and schools do a lot of long-term financial planning that includes aid—but aid should be wound down. The process could start by ending tax incentives which tend to favor better off students, then phasing out student loan programs such as PLUS loans that have no maximum income level for qualification, then phasing out “subsidized” loans, and finally phasing out grants.

The major concern is that this would reduce higher education access for low-income Americans. There is, though, little evidence that aid has helped low-income Americans very much: According to the Pell Institute, in 1970, 6 percent of dependent members of lowest-quartile income families had obtained a bachelor's degree by age 24. By 2013 that number had risen to just 9 percent. For the upper quartile, in stark contrast, the number rose from 40 percent to 77 percent.¹⁹ Higher prices, if nothing else, make college appear more out of reach if you are low income, and aid helps to fuel those price increases.

Even low-income students, though, would likely be able to access private loans or other funding if they demonstrated an ability to handle college-level work and were to pursue a degree in an in-demand field. Estimates vary depending on how one prices such things as opportunity costs to pursuing higher education, but the average person with just a bachelor's degree earns roughly \$1 million more over their lifetime than the average person with just a high school diploma.²⁰ That is a big payoff that gives both the student and lender a good chance of strong profits, so lenders would have an incentive—even absent collateral—to work with low-income students that show

solid academic ability. Moreover, absent lots of aid-enabled price inflation, it is likely that the price schools charge—or other options to attain marketable skills—would be less expensive than they are today.

Short of phasing out all federal aid programs, only programs not well focused on low-income students, including PLUS loans and tax incentives, could be phased out.

All that said, there does not currently appear to be much appetite for greatly reducing federal student aid. Let us, then, look at four proposals for making college more affordable that appear to be gaining in popularity: “free” college; requiring certain percentage payouts from college endowments to help keep down prices, income-share agreements, and “skin in the game” for schools. I’ll briefly address each one.

“Free” college: Proposals vary, but generally involve Washington incentivizing states with some sort of matching funds to increase their subsidies to public colleges and make them debt-free, tuition-free, or in some other way lower priced. While such proposals might keep prices low, the costs to taxpayers could be quite high: it is likely that large federal expenditures would be needed to goose large state expenditures. “Free” college would also likely exacerbate American higher education’s overconsumption—or, at least, non-completion—problem. Big subsidies to students and schools have likely encouraged people to enroll in programs for which they are under-prepared, under-motivated, or both. According to federal data, the 6-year completion rates for first-time, full-time students at the public institutions where they started bachelor’s degree programs stood at just 59 percent for students entering in 2008. In open-admission public institutions, it was just 35 percent.²¹ By incentivizing yet more marginal students to enroll in college, free college proposals would likely increase non-completion while making already large schools bigger and more bureaucratic, and thus less responsive to student needs.

Endowment payouts: Harvard University’s endowment stood at about \$36 billion as of the end of 2015. Stanford’s was around \$22 billion.²² Those are big numbers, and at first blush it seems reasonable to ask why, with all that stockpiled money, they should charge \$43,280 and \$44,184, respectively, in tuition?²³

It is first important to note that the uses for endowment funds are often restricted by donors, and cannot simply be directed to financial aid. More important for higher education writ large, very few institutions have endowments that even hold a candle to those of Harvard or Stanford. Including branch campuses, there are 4,627 degree-granting postsecondary institutions in the United States.²⁴ As of the end of 2015, only 95 had endowments exceeding \$1 billion, and some of those were for entire public systems, such as the University of Texas and the University of California.²⁵ It is not clear that most schools would be able to make major inroads into their prices even if they were to spend more of their endowments, or that they would not spend more only to increase their prices to recapture it. It would also be an unstable and unpredictable funding source if based on endowment earnings—what if a school took a loss, as several schools with endowments above \$1 billion took between 2014 and 2015, or had only small earnings? The desire to see rich schools furnish more aid is certainly understandable, but will do little if anything to address the college price problem.

Income-share agreements (ISA): These investment vehicles have one major advantage over ordinary loans: they are repaid in amounts based on earnings, not set monthly amounts to repay a set total. So borrowers earning nothing, or small amounts, are not burdened with unaffordable payments, but as they earn more they and their investors stand to make a great deal. From the borrowers' perspective this is largely like income-based loan repayment, though the ISA investor stands to earn more than a traditional lender.

ISAs could be fine ways to fund education, but if they were used in a government program, open to essentially anyone as is currently the case with federal loans, they would have no more price-dampening effect than federal loans. They would still move third-party money to students, without regard to demonstrated ability or field of study, while inhibiting students' incentives to demand the most efficient acquisition of skills possible. They would also enable schools to raise prices. Also, as long as federal loans with generous terms exist, ISAs will have trouble competing for students who expect to have substantial earnings over the repayment period.

“Skin in the game”: Many people have proposed that colleges and universities be on the hook to repay some percentage of their graduates' debt if the default rates of their graduates pass a certain threshold, say 10 percent, with the percentage of the debt the schools would have to pay increasing as default rates go up. This makes intuitive sense because schools currently bear no risk when their graduates do poorly, getting paid no matter what. In practice, however, there are serious challenges to skin in the game. The first is that schools that take the highest performing students will be in no jeopardy because, essentially, they are taking the “easy cases.” Schools taking students on the academic or financial margins, in contrast, may be doing yeoman's work and, in the process, opening themselves up to serious penalties.

The “right” balance of rewarding and punishing schools, accounting for student bodies, would be very difficult to strike. Who knows what it is? And skin in the game may not help actual students: If schools with high overall default rates are eventually put on the hook, they may either stop taking marginal students, or go out of business. That could cause students on the margin to lose higher education access, or perhaps more likely, to go to schools where there are enough high-achieving students to balance them out, but the poorly performing students themselves might do no better. Their default effect would just be diluted. And the effect of skin in the game on prices would be indirect at best, maybe causing schools to hold down prices—and hence debt and risk of default—but more likely encouraging them to fiddle with the composition of their student bodies. Finally, there is a real risk of politically favored schools being given preferential treatment, while applying the rules to disfavored schools such as for-profit institutions.

Conclusion

Many factors are at play in the college cost “crisis,” but underlying it all is the fact that people in colleges, like most human beings, will try to maximize their revenue if they can. The key to counterbalancing that is to have consumers pay with their own money, or money they receive voluntarily from others. Requiring greater endowment payouts, or other proposals such as free college or “skin in the game,” do too little to address that, and often carry big additional dangers.

Thank you, and I look forward to your comments and questions.

¹ U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 2015*, Table 330.10, https://nces.ed.gov/programs/digest/d15/tables/dt15_330.10.asp?current=yes.

² Mark J. Perry, "Higher Education Bubble: College Tuition Doubled Over the Last 10 Years vs. +52% for Medical Care," Carpe Diem Blog, July 26, 2011., <http://mjerry.blogspot.com/2011/07/higher-education-bubble-college-tuition.html>.

³ Student debt data from first chart in Jeffrey Sparshott, "Congratulations, Class of 2015. You're the Most Indebted Ever (For Now)," *Wall Street Journal*, May 8, 2015, <http://blogs.wsj.com/economics/2015/05/08/congratulations-class-of-2015-youre-the-most-indebted-ever-for-now/>, 1993 figure adjusted for inflation by Neal McCluskey; default data from U.S. Department of Education, "National Student Loan 2-Year Default Rates," <http://www2.ed.gov/offices/OSFAP/defaultmanagement/defaultrates.html>.

⁴ Data from second chart in Sparshott, 2015.

⁵ William J. Baumol and William G. Bowen, *Performing Arts: The Economic Dilemma* (New York: The Twentieth Century Fund, 1966).

⁶ Robert B. Archibald and David H. Feldman, *Why Does College Cost So Much?* (New York: Oxford University Press, 2011).

⁷ Richard Arum and Josipa Roksa, *Academically Adrift: Limited Learning on College Campuses* (Chicago: The University of Chicago Press, 2011), p. 3.

⁸ Arum and Roksa, pp. 35-36.

⁹ National Center for Education Statistics, National Assessment of Adult Literacy (NAAL), <https://nces.ed.gov/naal/>.

¹⁰ State Higher Education Executive Officers, "State-by-State Wave Charts (XLS)," SHEF — State Higher Education Finance FY15, <http://www.sheeo.org/projects/shef-fy15>.

¹¹ William J. Bennett, "Our Greedy Colleges," *New York Times*, February 18, 1987, <http://www.nytimes.com/1987/02/18/opinion/our-greedy-colleges.html>.

¹² Neal McCluskey, "The Newly Updated Help-That-Hurts List," SeeThruEdu.com, January 7, 2016, <http://www.seethruedu.com/the-newly-updated-help-that-hurts-list/>.

¹³ Bridget T. Long, "The Impact of Federal Tax Credits for Higher Education Expansion," in Caroline M. Hoxby, ed., *College Choices: The Economics of Where to Go, When to Go, and How to Pay for It* (Chicago: University of Chicago Press, 2004), pp. 101-165.

¹⁴ See Neal McCluskey, "How Am I Supposed to Learn Anything Without a Lazy River and Wet Wall?" SeeThruEd, May 19, 2015, <http://www.seethruedu.com/how-am-i-supposed-to-learn-anything-without-a-lazy-river-and-wet-wall/>.

¹⁵ Brian Jacob, Brian McCall, and Kevin M. Stange, "College as Country Club: Do Colleges Cater to Students' Preferences for Consumption?" National Bureau of Economic Research Working Paper 18745, January 2013.

¹⁶ U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 2014*, Table 331.60, https://nces.ed.gov/programs/digest/d14/tables/dt14_331.60.asp?current=yes.

¹⁷ U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 2014*, Table 331.35, https://nces.ed.gov/programs/digest/d14/tables/dt14_331.35.asp?current=yes.

¹⁸ College Board, "Total Undergraduate Student Aid by Source and Type over Time," *Trends in Higher Education*, Table 1A, Excel File, <https://trends.collegeboard.org/content/total-undergraduate-student-aid-source-and-type-over-time-0#Also%20Important>.

¹⁹ The Pell Institute and PennAHEAD, "Indicators of Higher Education Equity in the United States: 45 Year Trend Report, 2015 Revised Edition," p. 31, http://www.pellinstitute.org/downloads/publications-Indicators_of_Higher_Education_Equity_in_the_US_45_Year_Trend_Report.pdf.

²⁰ Anthony P. Carnevale, Ban Cheah, and Andrew R. Hanson, "The Economic Value of College Majors: Executive Summary," Georgetown University Center on Education and the Workforce, 2015, p. 5. <https://cew.georgetown.edu/wp-content/uploads/Exec-Summary-web-B.pdf>

²¹ U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 2015*, Table 326.10, https://nces.ed.gov/programs/digest/d15/tables/dt15_326.10.asp?current=yes.

²² National Association of College and University Business Officers, "U.S. and Canadian Institutions Listed by Fiscal Year (FY) 2015 Endowment Market Value and Change in Endowment Market Value from FY2014 to FY2015," 2016, http://www.nacubo.org/Documents/EndowmentFiles/2015_NCSE_Endowment_Market_Values.pdf.

²³ Data from Harvard University, "Cost of Attendance: Tuition and Expenses," <https://college.harvard.edu/financial-aid/how-aid-works/cost-attendance>; and Stanford University, "Tuition and Fees, 2014-15," <https://registrar.stanford.edu/students/tuition-and-fees/related-links-and-previous-years-tuition/tuition-and-fees-2014-15>. Stanford's undergraduate tuition was multiplied by three to reflect enrollment for three academic quarters.

²⁴ U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 2015*, Table 317.10, https://nces.ed.gov/programs/digest/d15/tables/dt15_317.10.asp?current=yes.

²⁵ National Association of College and University Business Officers, 2016.