

Don't forget private, non-profit colleges

Matthew M. Chingos

Executive Summary

Private, non-profit colleges enroll 3.4 million full-time equivalent students, or 30 percent of all U.S. students attending four-year institutions. But they receive comparatively little attention relative to public colleges and the for-profit sector, perhaps because the conventional wisdom casts private colleges based on the profile of the most elite institutions in the sector, which have large endowments and charge high tuition to mostly wealthy students.

This report provides new descriptive information on private, non-profit colleges. Key findings include:

- Private colleges are not much more selective than public colleges, on average, and both sectors vary widely in terms of selectivity.
- The relative enrollment of private and public colleges varies widely across states, from a high of more than 60 percent in Massachusetts and Rhode Island to less than 5 percent in Alaska, Arizona, Nevada, New Mexico, and Wyoming.
- Private colleges serve a similar proportion of low-income students as public colleges, and low-income students have higher economic mobility rates at private colleges (although this may be due to their greater selectivity).

The fact that the private, non-profit sector is already integrated into the broader higher education system, through federal aid and some state aid programs, suggests that these policy levers might be used to better leverage the private sector to further policymakers' goals, such as increasing educational attainment overall and for students from disadvantaged backgrounds.

In particular, state policymakers need to consider the role of the private sector when deciding the right balance between direct funding of public institutions and vouchers that students can use at any institution (in the state or more broadly). These debates also intersect with increased interest among federal policymakers in moving away from the federal government's historical focus on providing aid through students (e.g., the Pell grant program and subsidized loans) to providing aid to institutions (through free college proposals).

Most students will continue to attend public colleges for the foreseeable future, but the private, non-profit sector plays an important role and may be in a position to contribute even more to the nation's educational attainment and economic mobility than it currently does.

Introduction

Public and for-profit colleges both feature prominently in higher education policy debates, usually for different reasons. Rising prices at public colleges and universities have prompted public concern about declining affordability, especially as states have cut back on taxpayer support to these institutions. Weak student outcomes at many for-profit colleges have drawn the attention of policymakers concerned about the waste of taxpayer money and the impact on students who leave college with debt and no degree.

But private, non-profit colleges receive comparatively little attention, despite the fact that these institutions enroll a substantial share of students at four-year colleges: 3.4 million full-time equivalent students, or 30 percent of all four-year enrollment (compared to 61 percent at public colleges and 9 percent at for-profits).ⁱ Consequently, better understanding the role this sector plays in U.S. higher education overall, and in each state, may reveal ways for policymakers to increase educational attainment.

Federal policy plays an important role in the financing of postsecondary education at institutions by providing grants to low-income students and access to loans to all students, in both cases on similar terms regardless of whether the funds are to be spent at a public, for-profit, or private, non-profit college. Congress will consider changes to these programs when it turns to the overdue reauthorization of the Higher Education Act this year.

State policy focuses largely on appropriations for public institutions, but many states also provide grants to students that can be used at both public and private institutions. For example, Texas awards almost \$300 million in need-based grant aid to students at private, non-profit institutions, about 35 percent of all spending on need-based state grants. Nationwide, 24 percent of state need-based grant aid (about \$1.9 billion) is spent at private, non-profit colleges.ⁱⁱ

In this report, I provide descriptive information about the private, non-profit sector overall in each state, and show how it is more similar to the public sector on many dimensions (including the enrollment and economic success of low-income students) than conventional wisdom might suggest. The wide variation across states in the relative size and characteristics of the public and private sectors revealed by this exploratory, descriptive analysis suggests the need to

tailor federal and state policy efforts to best leverage the private sector in each state to meet policymakers' goals.

Data

I draw on institution-level data from the U.S. Department of Education's Integrated Postsecondary Data System (IPEDS) from 2013-14, the most recent year for which complete data are available. I examine full-time equivalent undergraduate enrollment at four-year institutions, defined as those that primarily grant bachelor's degrees.ⁱⁱⁱ In addition to enrollment, I also use IPEDS data on net price for low-income students (tuition, fees, room, board, and other expenses less grants and scholarships for dependent students from families making less than \$30,000 per year), the share of in-state students, and average SAT/ACT scores.^{iv}

I focus my comparison on four-year public and private non-profit colleges, setting aside the for-profit portion of the four-year sector to simplify the analysis and exposition. The for-profit sector also presents measurement challenges in terms of missing data and large numbers of online students (e.g., the University of Phoenix enrolls an enormous number of students, which would be associated with Arizona in my analysis even though most are online). I also set aside two-year colleges, an important sector but one in which the private, non-profit sector plays a very small role.

I link the IPEDS data to recently published data on college enrollment by family income and economic mobility rates constructed by researchers using tax records from the Internal Revenue Service.^v First, I examine the share of the student body at each college that comes from low-income families, defined as the bottom 20 percent of the family income distribution.^{vi} Second, I examine the economic mobility rate of these students, which is the percentage of them that earn in the top 20 percent of the individual income distribution as young adults (a limited but important measure of mobility). These data are based on students who were born in the early 1980s and attended college between ages 19 and 22 in the early 2000s.^{vii}

I use these institution-level data to calculate summary statistics by state, separately for public and private non-profit institutions. These statistics are weighted by the full-time equivalent undergraduate enrollment at each institution.

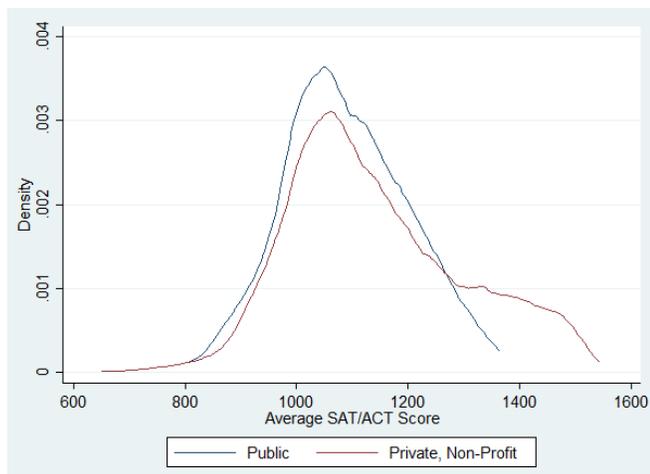
Descriptive findings

- Public and private, non-profit colleges are more similar in terms of selectivity than conventional wisdom suggests, but also differ in the expected ways in terms of pricing and in-state enrollment.

Private colleges bring to mind highly selective institutions with leafy campuses and large endowments. But the typical private, non-profit college in the U.S. is surprisingly similar to the typical public college on several dimensions, and on characteristics that differ on average there is still substantial overlap in the distributions of individual colleges.

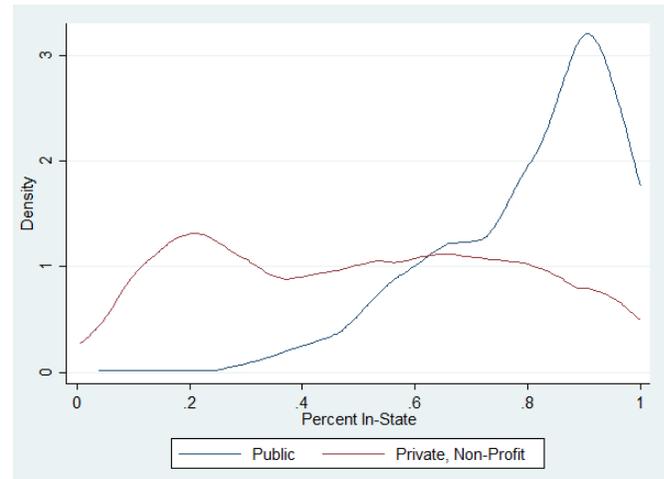
On average, private colleges are not much more selective than public colleges, measured in terms of average SAT/ACT score (Figure 1) or the admission rate (Appendix Figure 1). The most selective colleges tend to be private, but the distributions largely overlap.

Figure 1. Distribution of average SAT/ACT scores of four-year public and private non-profit colleges



A principal difference between public and private institutions is that public colleges charge lower prices to in-state students, and thus tend to enroll more in-state students. However, Figure 2 shows that there are also many private colleges that draw largely from the states where they are located, as well as some public colleges with substantial out-of-state enrollment.

Figure 2. Distribution of percentage of in-state students at four-year public and private non-profit colleges



Appendix Figure 2 shows the substantial difference in average net prices charged to low-income students (publics charge substantially less, on average), although there is greater variation in the distribution of prices across private, non-profit colleges.

- Relative enrollment at private vs. public four-year colleges varies enormously across states.

Table 1 reports key statistics on enrollment, low-income enrollment, low-income success (economic mobility), and percent in-state by state and sector (additional statistics, including net price, SAT/ACT scores, and admissions rates, are reported in the data appendix). It is immediately apparent that the relative size of the private, non-profit sector varies enormously across states, from a high of more than 60 percent in Massachusetts and Rhode Island to less than 5 percent in Alaska, Arizona, Nevada, New Mexico, and Wyoming.^{viii}

Table 1. Enrollment, low-income enrollment, low-income success, and percent in-state by state and sector

State	Enrollment		Low-Income Access		Low-Income Success		Percent In-State	
	Public	Private	Public	Private	Public	Private	Public	Private
MA	34%	66%	6%	5%	33%	44%	84%	30%
RI	38%	62%	6%	6%	29%	35%	56%	9%
NY	45%	55%	16%	9%	35%	41%	90%	54%
NH	51%	49%	5%	5%	28%	30%	47%	17%
IL	51%	49%	7%	7%	31%	32%	87%	61%
ID	52%	48%	8%	4%	18%	19%	67%	21%
PA	52%	48%	7%	6%	27%	37%	76%	48%
CT	53%	47%	5%	5%	36%	43%	81%	27%
VT	54%	46%	7%	7%	22%	32%	35%	12%
MO	56%	44%	6%	9%	23%	23%	75%	45%
IA	56%	44%	3%	7%	34%	26%	60%	44%
ME	60%	40%	10%	7%	16%	29%	76%	33%
UT	61%	39%	4%	2%	22%	30%	77%	22%
TN	65%	35%	9%	9%	18%	23%	88%	48%
HI	65%	35%	11%	11%	16%	23%	68%	33%
NE	66%	34%	5%	8%	26%	23%	79%	58%
VA	67%	33%	6%	8%	37%	24%	78%	38%
MN	68%	32%	6%	4%	22%	33%	75%	65%
USA	68%	32%	9%	8%	28%	32%	80%	49%
OH	69%	31%	7%	6%	17%	24%	80%	60%
IN	70%	30%	5%	5%	20%	32%	76%	54%
FL	71%	29%	9%	12%	32%	28%	87%	48%
NC	71%	29%	8%	9%	22%	25%	86%	49%
DE	72%	28%	2%	6%	39%	18%	36%	69%
NJ	74%	26%	9%	9%	40%	38%	92%	68%
SC	74%	26%	8%	11%	22%	16%	62%	64%
WI	75%	25%	4%	5%	22%	26%	75%	57%
CA	76%	24%	12%	8%	41%	39%	90%	65%
WA	76%	24%	5%	5%	35%	28%	81%	50%
KY	77%	23%	9%	13%	15%	17%	73%	64%
OR	77%	23%	7%	7%	28%	28%	64%	35%
GA	79%	21%	8%	9%	26%	26%	89%	47%
MD	79%	21%	9%	6%	28%	39%	68%	38%
MI	80%	20%	5%	10%	29%	20%	83%	75%
KS	81%	19%	5%	9%	24%	17%	74%	49%
OK	81%	19%	10%	11%	24%	16%	73%	49%
TX	82%	18%	12%	8%	28%	29%	94%	73%
SD	82%	18%	7%	8%	22%	17%	60%	45%
AR	84%	16%	13%	11%	20%	16%	77%	43%
MS	85%	15%	13%	14%	19%	19%	61%	56%
LA	85%	15%	15%	12%	19%	26%	87%	37%
AL	85%	15%	10%	12%	21%	20%	64%	46%
WV	89%	11%	10%	10%	17%	14%	61%	43%
CO	89%	11%	5%	5%	28%	35%	74%	38%
ND	90%	10%	6%	7%	31%	40%	42%	47%
MT	91%	9%	9%	11%	19%	29%	66%	47%
AZ	97%	3%	5%	14%	32%	28%	59%	32%
NV	97%	3%	5%	23%	27%	10%	77%	23%
AK	98%	2%	8%	23%	19%	10%	92%	53%
NM	98%	2%	16%	23%	16%	10%	80%	16%
WY	100%		5%		30%		52%	

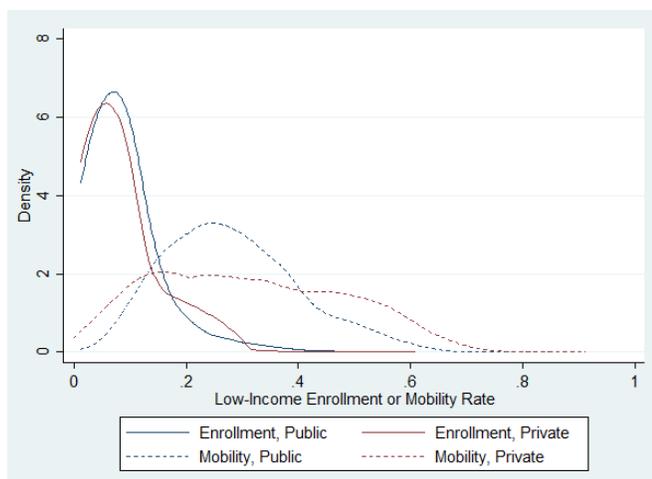
Three states have more undergraduates at four-year, private, non-profit colleges than at four-year public colleges, and an additional eight fall just short of a majority (40-50 percent of the two-sector enrollment). States with larger public sectors tend to be located in the southern and western U.S., whereas states with large private sectors include much of the northeast.

It is important to note that these figures do not necessarily reflect the college enrollment choices of students from each state. For example, in-state students make up only a minority of enrollment at private colleges in Massachusetts (30 percent), Rhode Island (9 percent), and New Hampshire (17 percent).

- *Private colleges serve a similar proportion of low-income students as public colleges.*

The higher prices charged by private colleges, on average, would seem to make it more difficult for them to recruit and retain students from low-income families. But the percentage of low-income students is similar across the two sectors nationwide—8 percent at privates vs. 9 percent at publics, and the distributions are very similar (Figure 3).

Figure 3. Distribution of low-income enrollment and success rates at four-year public and private non-profit colleges



There is significant variation across states in the relative socioeconomic diversity of students at public and private colleges (Table 1). In Delaware and Iowa, for example, the percentage of low-income students at private colleges is more than twice that at public colleges. In states like New York and Utah, low-income representation is higher at public colleges.^{ix}

The state of Delaware illustrates that these statistics do

not always follow the expected pattern. In Delaware, the public sector is much more selective and enrolls a much lower share of in-state students (36 percent, compared to 69 percent in the private sector). The role that factors such as net price, distance from where prospective students live, and competitiveness of admissions play in determining the types of students that are served by private vs. public are all fertile ground for future research.

But overall, the fact that low-income students are not substantially concentrated in the public sector runs contrary to the conventional wisdom about public vs. private institutions. A potentially important caveat to this finding is that the low-income percentages reported here are for traditional-age students only. However, as noted above, the share of traditional-age students is similar (about 75 percent) at both public and private non-profit, four-year colleges.^x

- *Private colleges tend to have higher economic mobility rates for low-income students, but they also tend to be somewhat more selective.*

Overall, low-income students who attend private colleges are modestly more likely to be economically successful as young adults—32 percent land in the top 20 percent of the income distribution, compared to 28 percent of low-income students at public colleges. But the distribution of mobility rates is much more spread out among private colleges, meaning there are more private colleges with very low and very high mobility rates than there are such public colleges (Figure 3).

The average SAT/ACT score at private colleges is 54 points higher (out of 1600) than at publics, suggesting that they are somewhat more selective. But the modest size of this difference and the wide range of private institutions in terms of selectivity (Figure 1) indicate that there is substantial overlap in the profiles of students at four-year publics and privates.

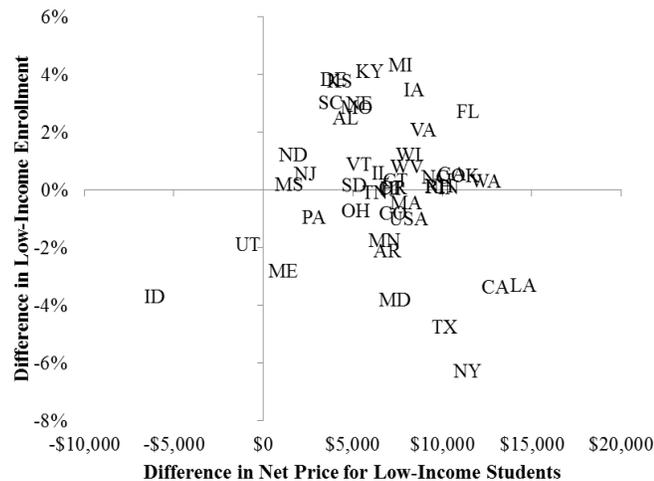
Table 1 shows that the relative economic mobility rates of low-income students vary widely across states. Though the majority of states have higher economic mobility rates at their private colleges, the reverse is true in a substantial number of states, including Delaware and Michigan. Within states, there is a positive correlation ($r=0.53$) between the average mobility rates of public and private colleges, perhaps because of other state-specific factors that affect mobility in both sectors. This is another reminder that these mobility data are descriptive, not causal.

The difference between mobility rates at private and public colleges within the same state is correlated with the difference in average SAT/ACT scores ($r=0.63$), once again suggesting that selectivity is an important predictor of mobility.^{xi} Possible reasons for this correlation include the higher levels of academic preparation at selective institutions and greater geographic mobility to attend college (and perhaps to move to take a higher-paying job), but other factors could be at play as well.

- *Differences in average net price between sectors are not a strong predictor of differences in low-income enrollment.*

Figure 4 shows that net prices are higher at private colleges than at their public counterparts in all states except for Idaho and Utah, as would be expected given state subsidies of public higher education. But there is not a strong relationship between differences between the sectors in the net prices charged to low-income students and the share of low-income students they enroll. There are many states, such as Iowa and Michigan, where the percentage of low-income students is higher at private colleges despite the fact that they charge substantially more.^{xii}

Figure 4. Difference (private minus public) in net price across sectors vs. difference (private minus public) in low-income enrollment across sectors, by state



Note: Difference is calculated as private minus public, so a positive difference indicates that net price or low-income enrollment is higher at private colleges (and a negative difference indicates the opposite).

It is important to emphasize this this analysis is purely descriptive, and there are likely factors that affect both

differences in net price and differences in low-income enrollment. Better understanding this relationship, with a focus on the private sector, is fertile ground for future research.

Implications

This analysis shows that the private non-profit sector is numerically important in many states, and that, on average, it enrolls its fair share of low-income students. The fact that this sector is already integrated into the broader higher education system, through federal aid and some state aid programs, suggests that these policy levers might be used to better leverage the private sector to further policymakers' goals, such as increasing educational attainment overall and for students from disadvantaged backgrounds.

First, state policymakers should consider the optimal balance of state appropriations to public institutions and state grant aid that can be used at private, non-profit colleges. Spending on state grant programs varies widely across states, from more than \$1,500 per full-time equivalent (FTE) student in South Carolina, Georgia, Louisiana, Tennessee, and Washington, to less than \$100 per FTE in Hawaii, Idaho, Arizona, Utah, Alabama, and New Hampshire.^{xiii}

Grant aid has the potential advantage to be more effectively targeted, such as to low-income students, so as to maximize its impact on individual behavior. States with the highest grant aid per student currently tend to distribute based mostly on merit, not need.^{xiv} And prior research indicates that even relatively small changes in price can have a substantial impact on where students go to college.^{xv}

There may well be states where additional targeted grant aid would be a better use of marginal increases in expenditures than additional appropriations to institutions (i.e., the additional spending may do more, on a per-dollar basis, to further policymakers' goals). This is most likely to be true in a state with a strong private sector that has capacity to expand. Historical data indicate that such capacity exists, as full-time equivalent enrollment has increased 54 percent since 1990 at private, non-profit institutions, compared to 45 percent at public institutions.^{xvi}

An even stronger case might be made for modifying existing state grant programs to include the private sector, especially in states that have public institutions that are weak relative to their private counterparts. For example, research has shown that a merit-based aid

program in Massachusetts that can only be used at in-state, public institutions harmed student outcomes by encouraging students to attend lower-quality institutions.^{xvii} Allowing students to use grant dollars from this program at one of the many private colleges in Massachusetts would likely mitigate that negative impact.

Federal policymakers already provide aid on similar terms to students at public and private, non-profit colleges. But in recent years there has been heightened interest among policymakers and advocates in increasing the federal government's role of providing direct funding to public institutions (e.g., through free college proposals). The fact that the private sector plays an important role in enrolling low-income students and propelling them up the income distribution is evidence that ought to be considered in these discussions.

Researchers and policy analysts also have an

important role to play in increasing our collective understanding of the role that private, non-profit institutions play in the U.S. higher education system. The analysis reported here only scratches the surface of complex issues such as the interplay of public funding, tuition pricing, selectivity, institutional expenditures, and other factors that affect college access and success.

Most students will continue to attend public colleges for the foreseeable future, especially given the size of the community college sector. And for-profit colleges' merit faces continued scrutiny given the troubling track record of many such institutions. But for students attending four-year institutions, including students from low-income families, the private, non-profit sector plays an important role and may be in a position to contribute even more to the nation's educational attainment and economic mobility.

i https://nces.ed.gov/programs/digest/d15/tables/dt15_307.10.asp?current=yes

ii NASSGAP 2014-15 annual survey, available at http://www.nassgap.org/viewrepository.aspx?categoryID=3#collapse_421.

iii IPEDS defines these institutions as those for which the majority of degrees granted are bachelor's degrees or higher.

iv I calculate average scores as the mean of the 25th and 75th percentiles reported in IPEDS, convert composite ACT scores to the SAT (math plus verbal) scale using published concordance tables, and use the test taken by a larger number of students at the institution. SAT/ACT scores and percent in-state are based on first-time, first-year students only. Percent in-state is from 2014-15 (not 2013-14) because reporting it is only mandatory in even-numbered years.

v <http://www.equality-of-opportunity.org/data/>. I link institutions in the IPEDS data to the mobility report card data using the OPEID-SUPEROPEID crosswalk provided by the authors. This essentially assigns the same low-income enrollment and mobility rates to groups of colleges, which does not introduce error into my analysis because I only report statistics at the state-by-sector level.

vi A limitation of these data is that they are based on traditional college-age students, and thus exclude students who attend college later in life. But in the four-year sector, public and private, non-profit colleges enroll similar percentages of older students: about

26 percent are over 24 (compared to 46 percent at community colleges and 64 percent at for-profit colleges). (Author's analysis of 2011-12 National Postsecondary Student Aid Study. The mean age by sector is: 24.0 at public four-years; 24.7 at private, non-profit four-years; 27.7 at public two-years; and 30.1 at private for-profits.)

vii More details on the low-income enrollment and mobility data I use are available at <http://www.equality-of-opportunity.org/data/college/Codebook%20MRC%20Table%201.pdf>. Note that there is a mismatch between when the students in these data attended college (early 2000s) and the year of IPEDS data I use (2013-14). This will only affect my analysis to the extent that enrollment, net price, and average SAT/ACT scores change substantially for individual colleges over time.

viii I exclude Washington, DC from the results because it is not a state, but note that the private, non-profit sector enrolls 92 percent of students, much more than any state.

ix In most states, the raw number of low-income students is higher at public colleges because they enroll a larger share of students overall.

x An additional reason the focus on traditional-age students may not be that significant a limitation in this analysis of the four-year sector is that the share of low-income students enrolled in the private, non-profit sector in each state is highly correlated with the share of Pell-eligible students enrolled in this sector ($r=0.94$). Of course this analysis does not include the large

number of low-income students at two-year colleges, the vast majority of which are public.

xi At the institution level (weighted by enrollment), the correlation between average SAT/ACT scores and the mobility rates of low-income students is 0.65 for public and private, non-profit institutions combined (0.58 for publics and 0.71 for privates). However, note that the average SAT/ACT score is for all students whereas the mobility rate is for low-income students only (who form a relatively small portion of the student body at most colleges).

xii The difference in annual net price may overstate the difference in the price of a degree because private colleges tend to have faster time-to-degree

than comparable public colleges (William G. Bowen, Matthew M. Chingos, and Michael S. McPherson, *Crossing the Finish Line: Completing College at America's Public Universities*, Princeton University Press, 2009).

xiii NASSGAP 2014-15 survey.

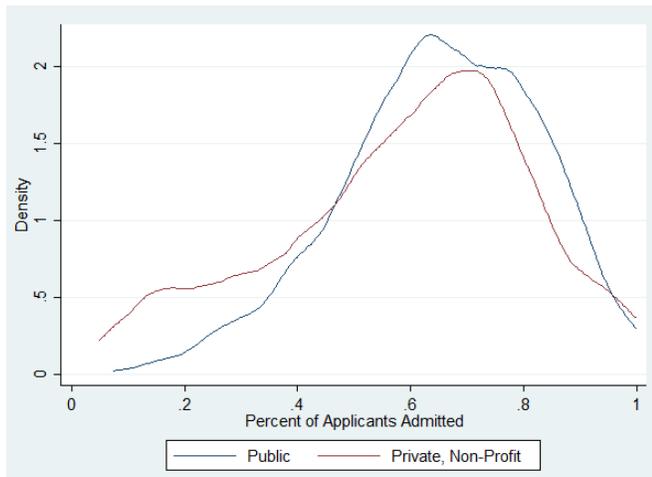
xiv <https://www.brookings.edu/research/beyond-need-and-merit-strengthening-state-grant-programs/>

xv <https://www.aeaweb.org/articles?id=10.1257/app.6.4.251>

xvi https://nces.ed.gov/programs/digest/d15/tables/dt15_307.10.asp?current=yes

xvii <https://www.aeaweb.org/articles?id=10.1257/app.6.4.251>

Appendix Figure 1. Distribution of average admission rates of four-year public and private non-profit colleges



Appendix Figure 2. Distribution of average net prices charged to low-income students at four-year public and private non-profit colleges

