

THE COMMON APP AND COLLEGE COMPETITION:
EFFECTS ON ADMISSIONS AND TUITION

by

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A thesis submitted in partial fulfillment
of the requirements for the degree

of

Master of Science

in

Applied Economics

MONTANA STATE UNIVERSITY
Bozeman, Montana

May 2025

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DEDICATION

To my parents, Grandma Betty, and my cat Nadia.

ACKNOWLEDGEMENTS

I would like to thank Dr. Andrew Hill for his invaluable advice and encouragement throughout every stage of this project. I also thank the other members of my committee, Dr. Gregory Gilpin and Dr. Wendy Stock, for their helpful suggestions that improved my work. Lastly, I am grateful for the camaraderie and support of the 2025 cohort—Caroline, Conner, Daniel, Dylan, Ellie, Farzana, Indira, Katy, Margo, and Sayem.

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ABSTRACT

This paper examines the effect of joining the Common Application, a centralized college admissions platform, on admissions, enrollment, and tuition using institution-level panel data and a staggered difference-in-differences approach. I also explore potential spillover effects of Common App presence on other colleges within the same market. The results suggest that Common App adoption contributes to market stratification as students increasingly apply to and attend Common App member schools relative to non-member schools. Additionally, I find evidence that Common App membership is associated with increased competitive pressure on tuition pricing. These findings have important implications for the evaluation of higher education policies amid growing concern about enrollment declines.

INTRODUCTION

An enrollment cliff in higher education is fast approaching. The share of high school graduates who continue on to attend college has decreased over time, potentially reflecting growing skepticism about the value of a college degree (Brenan, 2023; National Center for Education Statistics, 2024). At the same time, slowing birth rates have reduced the size of the national pool of potential students. When today’s kindergarteners reach college age, enrollment is projected to drop more than 20 percent in some states. This is in addition to the existing 15 percent decrease since 2010 (Lane et al., 2024). Declining enrollment is not the only financial pressure on colleges. Schools are navigating fluctuations in state funding, increased operating costs, and increased competition from online for-profit institutions (Commonfund Institute, 2024; Deming et al., 2019; Kunkle, 2023). College closure rates have spiked recently as many more schools imposed steep cuts to avoid potential closures (Kelchen et al., 2025). In response to these pressures, colleges are adopting new strategies to maintain competitiveness and enrollment levels. This paper evaluates the effects of one of these approaches.

Colleges are limited in the strategies they can successfully employ to maintain or increase tuition revenue per student. These limits are often a consideration, particularly at public universities, which may be subject to tuition freezes, tuition reciprocity agreements, and mandates to enroll a higher proportion of in-state students. Increasing the number of students or schools without supply constraints can be an alternative avenue to increase revenue. One way colleges attempt to attract more students is to reduce friction in the admissions process. This can include lowering application fees, eliminating test score requirements, and guaranteed “direct admissions” offers (Odle and Delaney, 2025a).

Centralized admissions platforms, such as the Common Application, advertise that they can help colleges recruit students by making it easier for users to submit applications and by increasing the college’s visibility to a wider network of potential students.

Joining the Common App may increase the number of applications and enrollment, but it could also have other impacts. Knight and Schiff (2022) provide evidence that using the Common App is associated with changes in student composition, including an increase in the share of out-of-state students. I explore whether Common App membership could also be correlated with tuition and financial aid, either because joining is a response to institutional finances or because these changes in student composition have an effect on finances. I also consider how the Common App’s market presence might affect non-member institutions. When one college joins the Common App, does it draw students away from other four-year colleges in the market, or does it help attract students on the margin of attendance? When evaluating higher education strategies, it is essential to consider both the indirect and spillover effects and examine which schools are likely to adopt these policies.

This paper contributes to the literature on the effects of the Common App and, more broadly, to changes in the college admissions process. I use a staggered difference-in-differences research design to exploit variation across time and institutions in Common App adoption while controlling for fixed college and time heterogeneity. I construct a sample of four-year colleges between 2003 and 2022 using data from the Integrated Postsecondary Data System (IPEDS). Information on the timing of membership in the Common App is sourced from Knight and Schiff (2022), the Common App website, and the websites of the member colleges.

My results support previous findings on the effects of joining the Common App on admissions and enrollment. I build on prior research to show that these effects vary by the rate of Common App adoption among competitors in the market. Greater Common App presence is associated with a higher degree of market stratification, as non-member schools

experience lower numbers of applications and enrolled students. Lastly, the adoption of the Common App and higher Common App market penetration are associated with lower in-state tuition rates and higher institutional aid per student. These results suggest a complex interplay between Common App adoption, competition, and school stratification.

Background

The Common Application is a non-profit, centralized admissions platform that allows users to send one application to many colleges. It was formed in 1975 by a group of 15 private colleges. Today, more than 1,100 colleges, in all 50 states and internationally, accept applications from the Common App (The Common Application, 2025a). As seen in Figure 1, membership rates among public schools have grown especially quickly in the last decade, with around three-quarters of the top 100 public colleges now members (U.S. News & World Report, 2024). The organization’s stated goals are to simplify college admissions, expand access to low- and middle-income students, be a voice for equity, and connect students to financial aid information. There are other centralized admissions platforms used by US colleges, although they have smaller networks of members. These include state-level common applications, the Coalition Application, with 170 members, and the Common Black College Application, which is exclusively used by Historically Black Colleges and Universities (Coalition for College, 2025; Common Black College Application, 2025; Odle and Delaney, 2025b).

The Common App can be used by non-profit, degree-granting, and accredited four-year institutions. The fee to become a new member starts at \$5,000, with an annual membership fee of \$2,500, and a small additional cost per application submitted according to current pricing (The Common Application, 2025b). For this cost, the Common App advertises the benefits of marketing to their applicant pool, access to the network of other member schools, and ease of implementation. In the 2023-2024 school year, more than 1.3 million US

and international students applied to colleges on the Common App website (The Common Application, 2025a). Most institutions still charge an application fee, but the marginal costs in time and effort for prospective students to apply to an additional institution decrease when the college joins the Common App. Information frictions in the application process are reduced when using the Common App because students can more easily access key information about the member institutions.

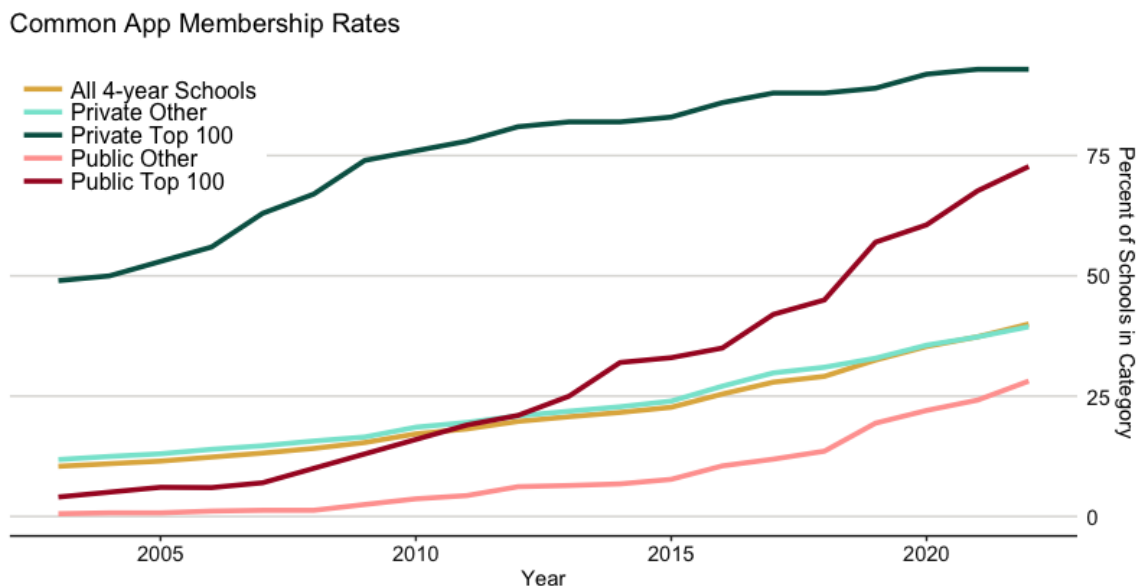


Figure 1. College Common App Membership Rates Over Time

Notes: Common App membership rates, defined as the percent of schools in the category that are Common App members, are calculated using IPEDS and Common App data (Knight and Schiff, 2022). Top schools are defined using the *US News and World Report* Best Colleges ranking (U.S. News & World Report, 2024).

Literature Review

An existing body of evidence supports a positive association between the use of the Common App and application rates. Smith (2014) finds that a nearby school joining the Common App is associated with a higher number of applications submitted by each local student. Knight and Schiff (2021) also use student-level data to conclude that prospective student choice, as measured by the number of applications submitted, increases with

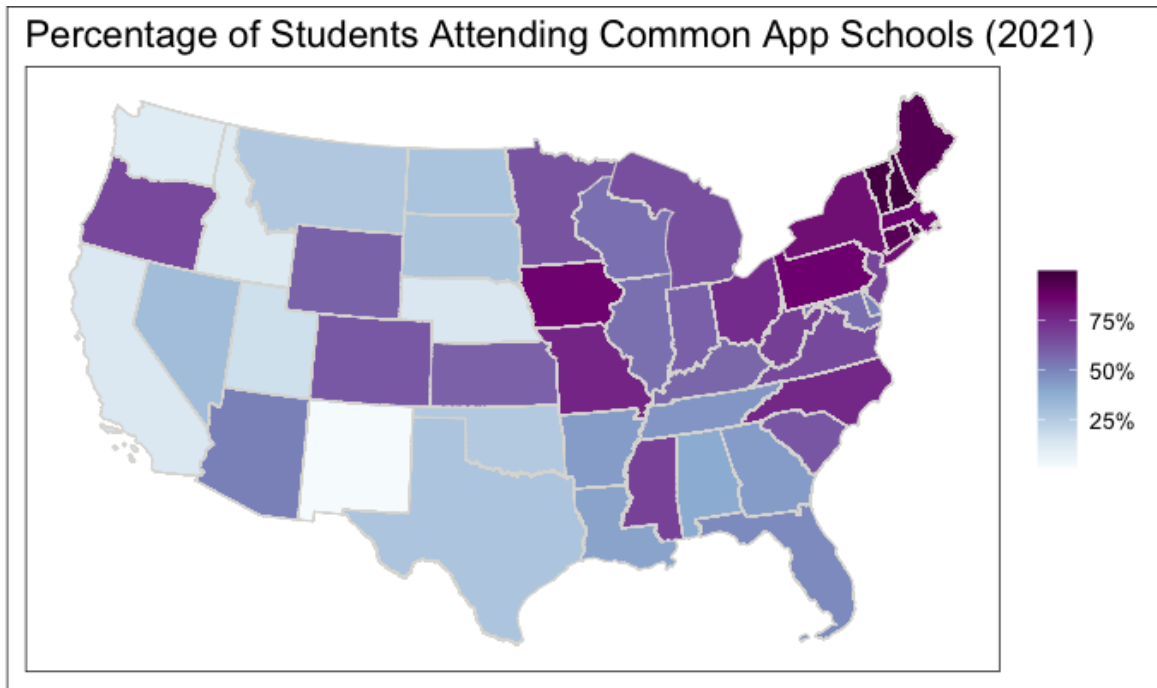


Figure 2. Map of Common App School Student Attendance Rates

Notes: Figure displays the percentage of all undergraduates in each state who attend a Common App member institution. Attendance rates are calculated using IPEDS and Common App data (Knight and Schiff, 2022). In 2021, New Mexico had the lowest rate at 1.4% and Rhode Island had the highest rate at 99.5% of students attending Common App schools.

Common App adoption. These results are reaffirmed in Page (2024), which finds that students induced to use the Common App when a local college joins the Common App send 1.4 additional applications and are more likely to enroll in member colleges by four percentage points, with the strongest effects observed for low-income applicants. Common App use does not affect a student’s probability of college attendance in general. Research using institution-level outcomes echoes these findings. Knight and Schiff (2022) analyze the effect of Common App adoption on institutional outcomes relating to admissions and student composition. They estimate membership is associated with 10 percent more applications and 11 percent more admissions. However, these newly induced students are less likely to enroll in the institution once accepted, as measured by the yield rate. Joining is associated with a slightly higher proportion of out-of-state and non-white students and a somewhat lower proportion of Pell Grant-eligible undergraduates. These out-of-state students are likelier to come from states with a higher degree of Common App market penetration.

These results motivate the question: What effect could a Common App-related change in student composition have on tuition and financial aid? Winters (2012) exploits exogenous variation in demographics to analyze the effect of resident cohort size on out-of-state enrollment at public schools. He finds that higher in-state enrollment at flagship universities leads to higher out-of-state tuition rates and “crowds out” nonresident enrollment. In Orlova et al. (2023), a 2016 policy change at the University of Wisconsin is studied. Following the removal of a nonresident enrollment cap, there were large increases in tuition revenue and financial aid due to the increase in out-of-state students. This finding suggests that if Common App adoption increases enrollment, especially of out-of-state and wealthier students, it could increase tuition revenues and make more funding available for resident students. It is important to consider reverse causality and omitted variables because just as enrollment changes could bring about differences in financial outcomes, price-setting approaches impact future student composition (Cook and Turner, 2022; Curs and Singell,

2010; Kelchen and Pingel, 2024). Some researchers have correlational approaches to find general relationships associated with student composition.

If Common App affects competition, it is important to consider how this might also affect tuition. The effect of competition on the market for higher education is both well-studied and contentious. A 2022 class-action lawsuit claiming that 17 elite schools were price-fixing by using a shared financial aid methodology is now resulting in settlements in the hundreds of millions of dollars (Douglas-Gabriel and Svrluga, 2024). Recent research using arguably exogenous changes in the environment of college markets does not always support the theoretical prediction that more competitive pressure will lower tuition. A study of merging institutions finds that tuition prices increase for the merged school but not for its competitors (Russell, 2021). Analysis of the expansion of online colleges found that markets, defined as metropolitan statistical areas or counties, with higher market concentration, had larger negative effects on enrollment but generally did not set lower tuition prices (Deming et al., 2019). However, Bound and Simon (2024) show that increased investment in public colleges decreases public tuition rates, putting more competitive pressure on private schools, resulting in slightly lower private tuition.

Defining a precise market for each school can be challenging. McMillen et al. (2007) argues that private universities compete based on price, and tuition prices are more correlated when a pair of universities are geographically closer. Smith et al. (2018) explores the overlap among schools that receive scores from SAT test-takers. They find colleges are more likely to compete with other colleges in the same state and those with similar characteristics.

There is also a body of literature that specifically relates to how the Common App could influence the market. First, there is evidence that universities price-discriminate based on How many other colleges do they believe an applicant is considering (Fillmore, 2022). If colleges are aware that students on the Common App submit more applications, they may compete more on price (Page, 2024; Smith, 2014). When a prospective student's state

flagship school joins the Common App, Ling (2019) shows that they send 17 percent more applications to all schools. Thus, other colleges in the market could also be affected by increased competition. Ling (2019) is the only paper I am aware of that directly estimates the impact of the Common App on tuition. She analyzes outcomes at private colleges using an instrumental variable approach. The within-state Common App adoption rate 20 years prior is an instrument for current Common App market penetration. She concludes that an increase of 10 percentage points in market adoption rate decreases net tuition and fees by 9 percent. In my analysis, I do not use this IV approach, allowing me to exploit more variation over time. I also build on this research by examining the outcomes of both public and private schools.

DATA AND EMPIRICAL STRATEGY

Outcome Data

The primary outcome data, including admissions, enrollment, tuition and financial aid, and other other outcomes, is sourced from the Integrated Postsecondary Education Data System surveys (IPEDS). All outcome variables are at the institution-year level. Data was obtained using Urban Institute’s Education Data Explorer (Urban Institute, 2023). Additional finance data was downloaded directly from IPEDS (National Center for Education Statistics, 2023). As part of an auxiliary analysis, I use quarterly lists of institutions under financial monitoring by the US Department of Education, available for download from the Office of Federal Student Aid (Office of Federal Student Aid, 2024b).

Admission Variables

Admission variables include the number of applications received, the number of acceptances, and the yield rate, which is the attendance rate among admitted students.

Enrollment Variables

Key enrollment measures include total freshman enrollment, in-state freshman enrollment, domestic out-of-state freshman enrollment, and international freshman enrollment.

Tuition and Financial Aid Variables

The primary tuition variables I consider are the published in-state and out-of-state tuition for full-time students. These are the “sticker prices” before any financial aid is applied. I also show results for gross tuition revenue per student before discounts and allowances. I include the average amount of institutional aid per student (full-time equivalent) to measure the level of financial aid provided by colleges directly.

Other Institutional Variables

Other outcome variables shown in Appendix A include the 75th percentile SAT score of enrolled students, the percentage of freshmen who are non-white, the percentage of undergraduate students who are Pell Grant-eligible, and the percentage of freshmen who are from out-of-state. Additionally, I examine the effects on the retention rate after the first year and the graduation rate in six years. However, there is limited data availability due to changes in the IPEDS methodology (Blom et al., 2020). Heightened Cash Monitoring serves as an indicator of financial stress. Institutions are placed on Heightened Cash Monitoring by the US Department of Education if there are concerns about the college’s financial or administrative responsibility Office of Federal Student Aid (2024a). Table 1 reports these variables’ summary statistics and data availability.

The panel dataset spans 2003 to 2022 in my main analysis. I exclude observations before 2003 to improve comparability between earlier and later observations because there have been major changes in the collection of certain IPEDS variables. Private and public school finance surveys became more aligned in 2003 (Blom et al., 2020; Jaquette and Parra, 2013). Table 2 displays the characteristics calculated separately for schools that joined the Common App in my sample and schools that have never joined the Common App. The characteristics of the different groups in 2003 are significantly different in most cases, motivating the need to control for underlying cross-sectional variation to compare their outcomes. For public and private schools, colleges that join the Common App have significantly higher enrollment, graduation rates, and tuition prices and are more likely to be research universities. The final sample of schools used in my main empirical analysis includes 2,511 Title IV eligible US colleges offering four-year undergraduate degrees. It consists of 831 public schools and 1,680 not-for-profit private schools. I exclude both for-profit and fully online institutions. For each results table, I hold the sample of institutions constant because data availability varies.

Table 1. COLLEGE SUMMARY STATISTICS (FULL SAMPLE)

	N	Mean	SD	Min	Max	Data Availability
Applications	27,425	5,168	9,164	0	149,801	2003-2022, required for schools without open admissions
Admissions	27,368	3,124	4,742	0	89,207	2003-2022, required for schools without open admissions
Yield	27,293	0.407	0.225	0.009	1	2003-2022, required for schools without open admissions
Freshman Enrollment	29,722	961	1,382	1	15,989	2003-2022
In-State Enrollment	22,045	798	1,147	1	13,001	2003-2020, required in even years
Out-of-State Enrollment	21,610	213	415	1	14,036	2003-2020, required in even years
International Enrollment	16,889	36	97.9	1	1,666	2003-2020, required in even years
In-State Tuition	21,424	16,321	11,818	0	61,490	2009-2021
Out-of-State Tuition	21,424	20,051	10,170	0	61,490	2009-2021
Avg Institutional Aid	29,374	11.7	46.8	0.00	4,317	2003-2021
SAT 75th %ile	19,708	582	61.8	320	800	2003-2022, reported when test scores required
Percent Non-white	25,183	0.347	0.255	0	1	2003-2022
Percent Pell	18,814	0.404	0.166	0	1	2007-2021
Retention Rate	22,326	0.710	0.150	0	1	2007-2020
Graduation Rate (Six Year)	14,774	0.502	0.183	0.006	1	2003-2012 cohorts
Heightened Cash Monitoring	16,340	0.064	0.245	0	1	2015-2022
Log Applications	27,425	7.37	1.89	0	11.9	2003-2022, required for schools without open admissions
Log Admissions	27,368	6.97	1.81	0	11.4	2003-2022, required for schools without open admissions
Log Freshman Enrollment	29,722	6.00	1.48	0.693	9.68	2003-2022
Log In-State Enrollment	22,045	5.73	1.58	0.693	9.47	2003-2020, required in even years
Log Out-of-State Enrollment	21,610	4.33	1.50	0.693	9.55	2003-2020, required in even years
Log International Enrollment	16,889	2.53	1.33	0.693	7.42	2003-2020, required in even years
Log In-State Tuition	21,424	9.36	1.05	0	11.0	2009-2021
Log Out-of-State Tuition	21,424	9.74	0.737	0	11.0	2009-2021
Log Avg Institutional Aid	29,374	1.61	1.19	0.00	8.37	2003-2021

Notes: Summary statistics are at the institution-year level for all colleges in the sample, which excludes colleges joining the Common App before 2004. In-state, out-of-state enrollment, and and percent non-white are reported for freshman students. Percent Pell Grant-eligible students is reported for all undergraduate students. The SAT 75th percentile measure is the average of math and reading 75th percentile scores for enrolled students. Heightened Cash Monitoring indicates whether an institution was under HCM1 or HCM2 for any quarter of the year, defined in Office of Federal Student Aid (2024a).

Table 2. CHARACTERISTICS OF COLLEGES BY COMMON APP MEMBERSHIP

	(1)	(2)	(3)
	Common App Members	Non-Common App Members	Common App vs Non-Common App Members Sig. Diff. <i>p</i> -value
Public Colleges			
Freshman Enrollment	1,910	1,138	< .001
Applications	6,512	4,984	.020
Acceptance Rate	70.3%	72.1%	.302
SAT 75th %ile	579	557	< .001
Grad Rate (6 Year)	51.7%	39.5%	< .001
Percent Non-White	24.7%	36.2%	< .001
Percent Out-of-State	14.6%	12.7%	.121
Tuition (In-State)	\$3,984	\$2,795	< .001
Revenue per FTE	\$28,349	\$19,505	< .001
Expenditures per FTE	\$26,178	\$18,337	< .001
Instruc Exps per FTE	\$8,674	\$10,340	.29
Research University==1	.62	.26	< .001
<i>N</i>	336	285	
Private Colleges			
Freshman Enrollment	461	184	.001
Applications	2,176	628	.001
Acceptance Rate	71.7%	74.4%	.034
SAT 75th %ile	584	572	.026
Grad Rate (6 Year)	55.2%	46.1%	.001
Percent Non-White	24.1%	25.6%	.398
Percent Out-of-State	34.7%	37.9%	.051
Tuition (In-State)	\$16,409	\$10,250	.001
Revenue per FTE	\$29,108	\$29,335	.894
Expenditures per FTE	\$25,269	\$29,986	.251
Instruc Exps per FTE	\$10,608	\$11,995	.214
Research University==1	.36	.23	.001
<i>N</i>	495	809	

Notes: Columns 1 and display mean 2003 values of row variables for four-year public and private not-for-profit institutions operating in 2003. Percent out-of-state is calculated using 2004 values of freshman enrollment. Column 1 reports values for institutions joining the Common App after 2003 and column 3 reports values for institutions never joining the Common App up to 2024. Welch t-tests are used to calculate the p-values in column 3.

The concentration of schools on the Common App varies geographically, with a higher percentage of schools on the Common App in the Northeast. Colleges that join the Common App are systematically different from colleges that do not join the Common App in other ways, as seen in Table 2. In addition to these level differences at the beginning of the analysis period, they appear to have experienced different trends in recent years. The average number of applications has more than doubled in most colleges, but Common App schools have seen even more growth, as seen in Figure 4. The percentage of out-of-state freshmen in public colleges has increased at Common App schools and decreased at non-Common App schools (Figure 5). Both published tuition and gross tuition revenue per student have increased more in Common App schools. In my analysis, I examine whether these changes in both Common App and non-Common App schools can be attributed to the Common App.

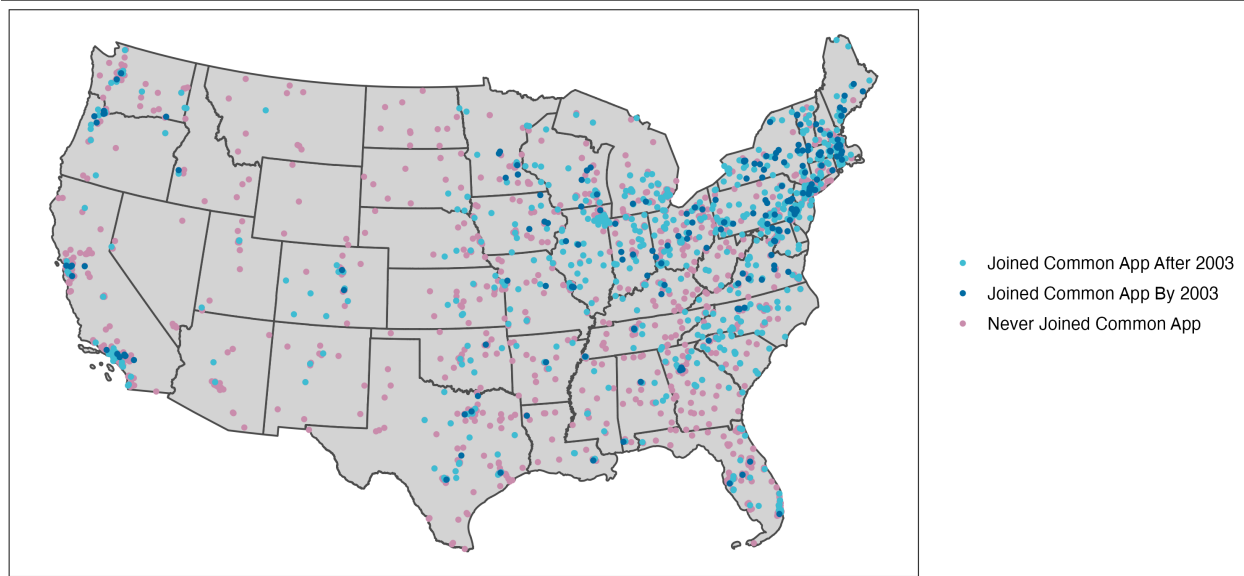


Figure 3. Map of Four-year US Colleges

Notes: Institution and Common App data sourced from IPEDS and the Common App (Knight and Schiff, 2022).

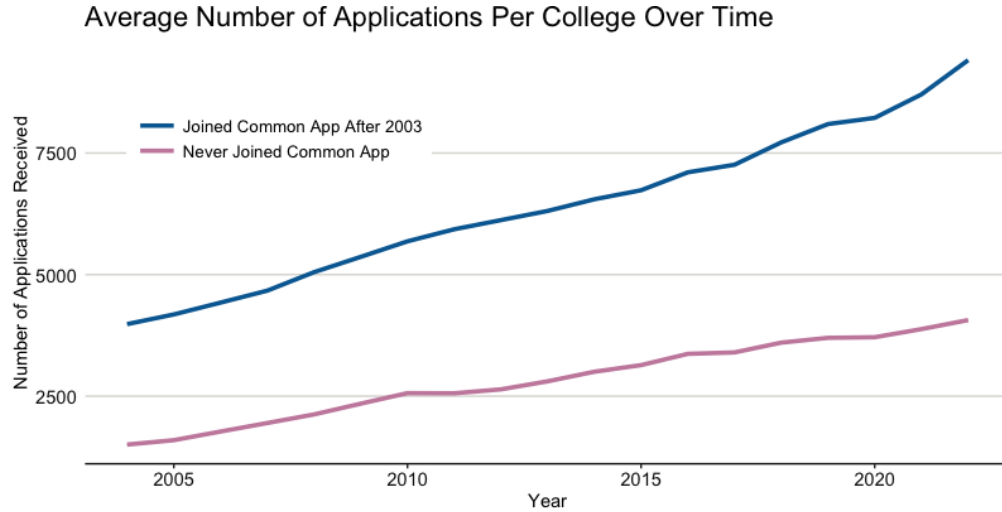


Figure 4. Applications Over Time

Notes: Figure shows the average number of applications received at each college per year in my primary sample, which excludes Common App members prior to 2004. Data from IPEDS and the Common App (Knight and Schiff, 2022).

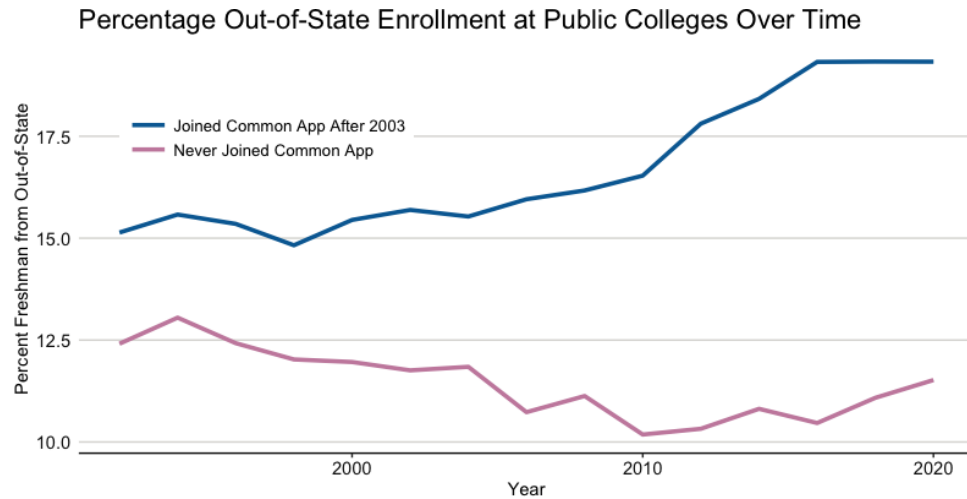


Figure 5. Out-of-State Enrollment Over Time

Notes: Figure shows the percentage of freshman students who are domestic students from out-of-state at each college per year in my primary sample, which excludes Common App members prior to 2004. Data from IPEDS and the Common App (Knight and Schiff, 2022).

Methodology

I initially use the estimating primary equation from Knight and Schiff (2022) to analyze to what extent Common App membership may influence these outcomes:

$$\ln(y_{ct}) = \beta_1 CA_{ct} + \mu_c + \mu_t + \epsilon_{ct} \quad (1)$$

where y_{ct} is an outcome variable at the college-year level, CA_{ct} is an indicator variable taking the value of 0 or 1 for current Common App membership, μ_c are college fixed-effects, and μ_t are year fixed-effects. After controlling for trends over time and time-invariant differences across institutions, β_1 can be interpreted as the approximate percent difference in the outcome variable for Common App members relative to non-Common App members. In addition to replicating this basic two-way fixed effect (TWFE) specification, I also estimate equation 2 which leverages variation in the percentage of students attending Common App member schools out of all students attending competitor schools in each college's market. My preferred definition of a college market is all other four-year schools in the state. This measure, $CompShare_{ct}$ is continuous from 0 to 1 and varies at the institution-year level. I interact this variable with CA_{ct} to allow for heterogeneous effects of Common App membership based on market penetration. This interaction term can also be interpreted as the difference in the impact of an increased Common App presence in the market for Common App members relative to non-Common App members.

$$\ln(y_{ct}) = \beta_1 CA_{ct} + \beta_2 CompShare_{ct} + \beta_3 CA_{ct} \times CompShare_{ct} + \mu_c + \mu_t + \epsilon_{ct} \quad (2)$$

This specification controls for time-invariant determinants of outcomes across units and common time trends through fixed effects for units and years. The remaining variation being

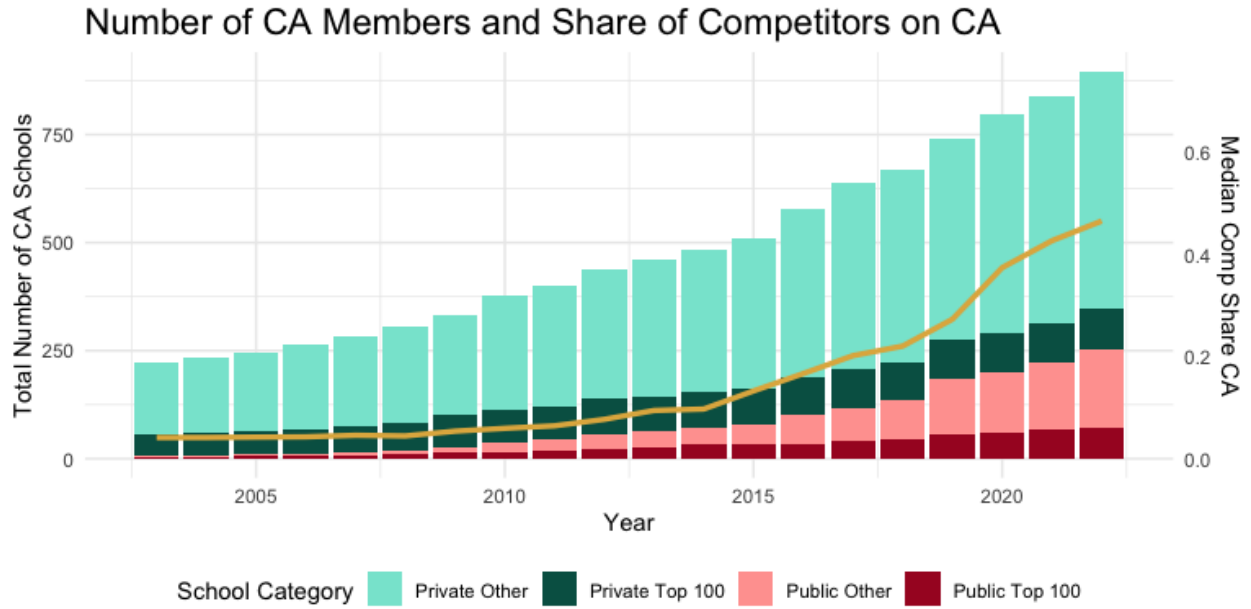


Figure 6. Common App Members and Median $CompShare_{ct}$ Over Time

Notes: The left axis shows the total number of Common App members over time. The right axis shows the median share of competitors on the Common App weighted by enrollment over time. $CompShare_{ct}$ is continuous from 0 to 1. Data from IPEDS and the Common App. Top schools are defined using the *US News and World Report* Best Colleges ranking (U.S. News & World Report, 2024).

exploited is in the timing of Common App adoption, CA_{ct} and the level of Common App penetration in the market, $CompShare_{ct}$ (Figure 19). An ideal experiment to determine the causal effect of the Common App would randomly assign some schools to join the Common App and leave schools outside of the market, not subject to spillover effects, as controls. If we are interested in the impact of Common App market penetration on other schools in the market, we could randomly select a school to join the Common App and examine the outcomes of the other schools. A control group for this binary treatment could be a market that did not experience any Common App adoption. We could also compare schools in markets with a higher treatment intensity, meaning a larger change in Common App school penetration, to those with a lower treatment intensity.

The identifying assumption for β_1 in both models to be interpreted as the causal effect of Common App enrollment on an outcome when the percent Common App market penetration is zero is that schools joining the Common App would follow the same trends in outcomes as those that did not join the Common App in a counterfactual where the joining schools did not become members. If Common App adoption coincides with unobserved policies that may also affect outcome variables, such as other changes in admissions recruitment strategy, β_1 would be biased. The direction of this bias would depend on the impact of the omitted variable. Also, colleges may select to join the Common App to increase enrollment, or specifically out-of-state or international enrollment, if they have limited ability to raise tuition. If they engage in other strategies targeting enrollment simultaneously, this would threaten the causal interpretation of any results. Knight and Schiff (2022) find evidence that joining the Common App is associated with higher application fees, which suggests that the estimated effect on applications is biased downward. After controlling for institution and time fixed effects, being a Common App member has a negative association with test score admission requirements. Eliminating test score requirements has been shown to increase applications, so this could bias β_1 upward (Bennett, 2022; Saboe and Terrizzi, 2019). Omitted variables

related to institutional selection into the Common App could also have their own spillover effects on other colleges in the market, affecting the estimates of β_2 and β_3 in Model (2). This consideration is discussed further in the results section.

The use of event studies can help assess the plausibility of the parallel trends assumption and allow for dynamic effects over time. It identifies the average treatment effect of the treated (ATT) by cohort and relative time. I visually examine and test the pre-trends for different outcome variables. I plot both the traditional TWFE event study model, shown below:

$$\ln(y_{ct}) = \sum_{k=-K}^{k=-1} \beta_{t+k} 1(t - J_c = k) + \sum_{k=0}^{k=K} \beta_{t+k} 1(t - J_c = k) + \mu_c + \mu_t + \epsilon_{ct} \quad (3)$$

where J_c is the year when a college joins the Common App, $1(t - J_c = k)$ is an indicator variable that a college joined the Common App k years ago, and β_{t-1} is normalized to zero. β_{t+k} can be interpreted as the effect of joining the Common App at time t on outcomes at time $t + k$, relative to outcomes at time $t - 1$. I also use the two-stage difference-in-differences estimator introduced in Gardner (2022) with the `did2s` package in R (Butts, 2021), which eliminates treatment effect heterogeneity contamination present in traditional staggered treatment TWFE event studies. In this approach, the outcome variable is regressed on the control group of non-Common App and not-yet-joined Common App colleges. The residualized outcomes from this regression are regressed on Common App membership status in the full sample to estimate the treatment effect with a clean counterfactual. Dynamic two-stage difference-in-differences estimates identify the average treatment effect of the treated (ATT) by cohort and relative time. In the appendix, I provide static results for Model (1) using the Gardner (2022) estimates and the Sun and Abraham (2021) approach designed for staggered treatment adoption and heterogeneous causal effects. These methods are incompatible with Model (2) because of the interaction term, so I exclude schools that joined

the Common App before 2003 to be able to better assess the parallel trends assumptions and to decrease the weight coming from ‘forbidden comparisons’ of always or earlier treated observations to later observations (Goodman-Bacon, 2021).

Common App Data

Data on Common App members by year is collected through various sources. I use a list of Common App members with join dates between 2003 and 2016, originally sourced from the Common App (Knight and Schiff, 2021). I supplemented this list by scraping archived versions of the Common App Explore page captured on the Wayback Machine (Internet Archive, 2024). These lists were cross-referenced with the current Common App Explore page, previous Common App press releases, and college websites to identify schools that left or rejoined later (The Common Application, 2025a). I also use IPEDS data to identify Common App member schools that closed or merged with other institutions. Data is collected up to the 2025 cohort of applicants. The number of colleges in each cohort is shown in Table 3. Although outcome data only extends through 2022, these most recent members are used in a robustness check that exclusively uses future joiners as a control group, following Knight and Schiff (2022).

In total, there are 1,109 member institutions of the Common App as of 2024. Since the inception of the Common App, 31 colleges left the Common App, two of which later rejoined. An additional 36 colleges closed or merged with another institution. In my sample of colleges for analysis, which excludes pre-2004 Common App members, there are 868 Common App schools. The sample includes 347 public schools and 521 not-for-profit private schools. Among the top 100 US public schools, 82 are members of the Common App. Among the top 100 US private schools, 93 are Common App schools. The Common App continues to see growth, with 453 Common App members since 2018. These new members are public schools at a rate of 53 percent, compared to the 27 percent public school rate among Common

App members that joined between 2003 and 2017.

I define the academic year of Common App adoption as the year following the opening of applications through the Common App. Schools can join the Common App any time during the year, but it is most common in August when the application window for the fall semester of the following year opens. Students who apply during this period are captured in the freshman IPEDS data for the following year. This delay motivates the use of event study models, which allow for dynamic treatment effects if Common App adoption does not immediately take full effect or its impact is not constant over time.

One difficulty in using Model (2) with the *CompShare_{ct}* variable is appropriately defining the level of Common App adoption among one’s competitors in a market. With my data, I do not observe all the schools being compared by applications to be able to extrapolate competitors. Model (2) assumes that schools joining the Common App outside of one’s competitive market do not affect their outcomes. Considering that, I operate using a relatively broad definition of competitors, supported by the literature - all other four-year colleges in the same state. I conduct robustness checks using several other market definitions as detailed in Table 4.

Table 3. NUMBER OF COLLEGES IN THE COMMON APP BY COHORT APPLICATION YEAR

CA Join Year	Number of Colleges	Percent of CA Colleges in Cohort
2004	11	1.27%
2005	12	1.38%
2006	19	2.19%
2007	18	2.07%
2008	21	2.42%
2009	29	3.34%
2010	42	4.83%
2011	24	2.76%
2012	37	4.26%
2013	25	2.88%
2014	23	2.65%
2015	27	3.11%
2016	68	7.83%
2017	59	6.80%
2018	34	3.92%
2019	79	9.10%
2020	80	9.22%
2021	50	5.76%
2022	64	7.37%
2023	65	7.49%
2024	50	5.76%
2025	31	3.57%
Total	868	100%

Notes: Columns describe the number and percentage of colleges of post-2003 Common App colleges in each Common App join-year cohort.

Table 4. COLLEGE MARKET DEFINITIONS

Market	
1	Colleges within the same state
2	Colleges within the same state and sector
3	Colleges with similar state, sector, and selectivity
4	Colleges within the same or bordering states
5	Colleges within the same or bordering states and sector
6	Colleges within the same or bordering states, sector, and selectivity
7	Colleges in NCES comparison group
8	Geographically closest 50 colleges

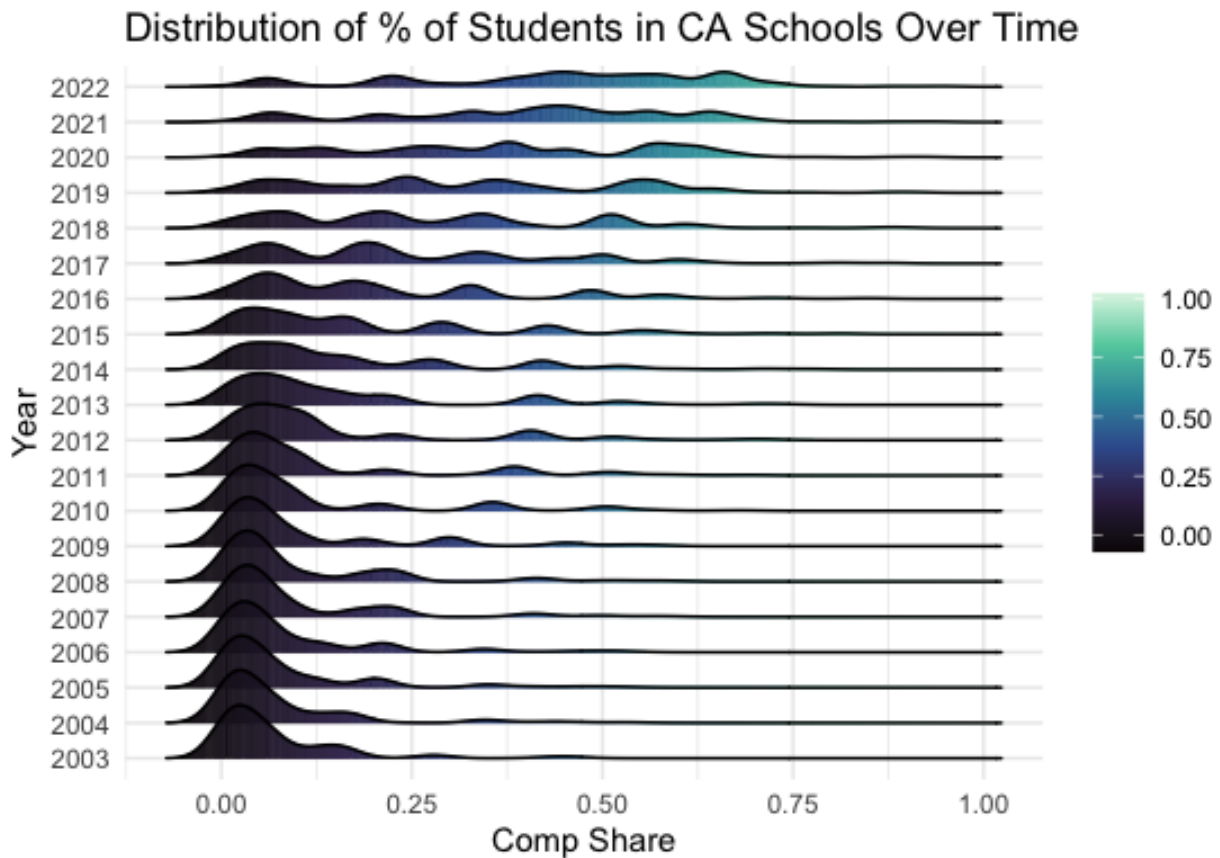


Figure 7. Common App School Attendance Rate Distribution Over Time

Notes: Figure displays the distribution of the $CompShare_{ct}$ variable in percentage form over time. $CompShare_{ct}$ varies continuously from 0 to 1. It is defined at the college-year level as the share of students attending competitor institutions who are enrolled at a college that is a member of the Common App.

RESULTS

Admissions

Estimates from the basic two-way fixed effects model, Model (1), in columns 1-3 of Table 5 indicate that joining the Common App is associated with a 14.0 percent increase in applications, a 13.6 percent increase in acceptances, and a 1.2 percent decrease in yield. Acceptances and applications rise together, suggesting that Common App membership does not greatly affect admissions rate and schools may have the intention of increasing enrollment. These estimates of β_1 are similar to those of Knight and Schiff (2022), who find an estimated effect of 12.0 percent on applications and 11.4 percent on acceptances. Subgroup analysis, shown in Table 11, reveals that these effects are strongest for private colleges. The event studies for applications and acceptances reveal a trend of a slight decrease before adoption and a discontinuous increase after adoption that persists over time. The event study for yield also shows an immediate reduction after joining, but the estimated effects are indistinguishable from zero several years later.

The estimated effects from the model including Common App adoption rates among competitors, Model (2), in columns 4-6 of 5 reveal evidence of a negative relationship between Common App adoption among competitors and admission outcomes for non-Common App schools. A 10 percentage point increase in Common App adoption among competitor schools, weighted by enrollment, is associated with a 4.0 percent decrease in applications and a 3.6 percent decrease in admissions. Member colleges in markets with more Common App adoption are predicted to see larger increases in application and acceptance numbers relative to non-Common App colleges.

Table 5. EFFECTS OF THE COMMON APP ON ADMISSIONS

	(1)	(2)	(3)	(4)	(5)	(6)
	Applications	Acceptances	Yield	Applications	Acceptances	Yield
CA Membership	0.140*** (0.018)	0.136*** (0.018)	-0.012*** (0.004)	0.129*** (0.024)	0.103*** (0.024)	-0.023*** (0.006)
Comp. Share CA				-0.398*** (0.084)	-0.356*** (0.085)	-0.003 (0.018)
CA Membership × Comp. Share CA				0.073 (0.067)	0.133** (0.066)	0.032** (0.015)
<i>Postestimation</i>						
Effect of joining if Comp. Share CA = .5				0.165	0.169	-0.007
[<i>p value</i>]				.001	.001	.161
Observations	27,425	27,368	27,293	27,406	27,353	27,279
Institutions	1,691	1,691	1,691	1,691	1,691	1,691
Year FE	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X

Notes: Columns 1–3 report separate regression results using Model (1). Columns 4–6 report separate regression results using Model (2). CA is defined as Common App membership and Comp. Share is defined as the percentage of students attending Common App member schools out of all students attending competitor schools in each college's market. Applications and acceptances are logged variables. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/***/ denote significance at the 10/5/1 percent levels.

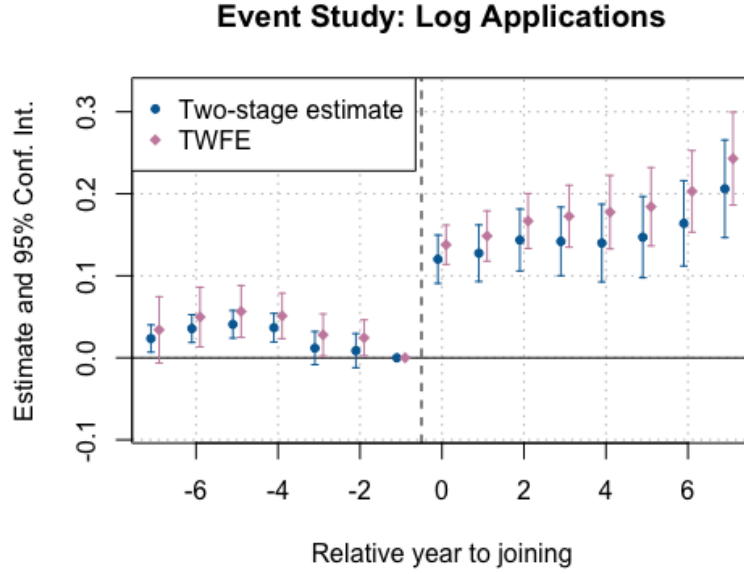


Figure 8. Event Study: Log Applications

Notes: Event study shows dynamic two-way fixed effects and Gardner (2022) two-stage difference-in-differences estimates of joining the Common App on log applications. A Wald test of joint nullity of the two-stage estimate pre-trend coefficients results in a p -value of $< .001$.

Enrollment

Estimates of β_1 from Model (1) displayed in Table 13 suggest that joining the Common App is associated with a slight increase in enrollment. Neither in- nor out-of-state enrollment have a significant association with Common App membership. Joining the Common App is associated with a 10.6 percent increase in the enrollment of international students. The event study estimates show this effect only becomes significant after the third year following membership. This relationship with international enrollment is the strongest for private rather than public colleges, conflicting with the hypothesis that public colleges may join the Common App to recruit more students who will be charged out-of-state tuition prices.

Columns 4-6 in Table 13 show a negative relationship between Common App adoption among competitors and enrollment outcomes for non-Common App schools. A 10 percentage

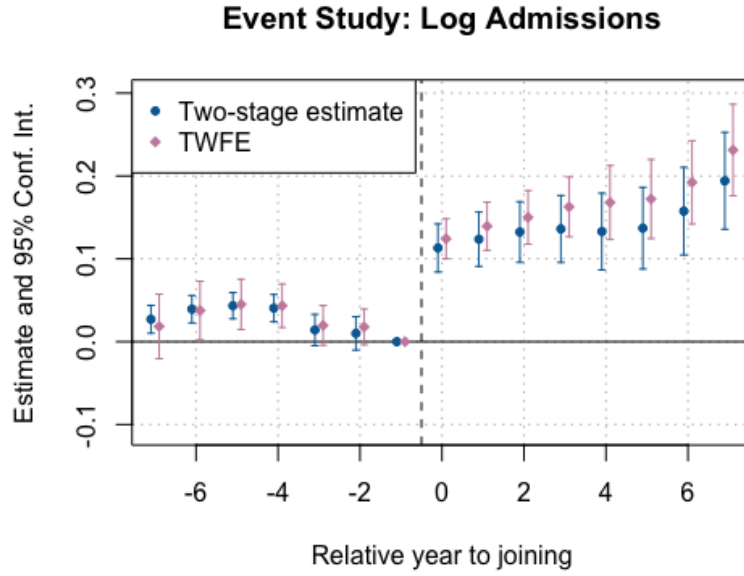


Figure 9. Event Study: Log Admissions

Notes: Event study shows dynamic two-way fixed effects and Gardner (2022) two-stage difference-in-differences estimates of joining the Common App on log admissions. A Wald test of joint nullity of the two-stage estimate pre-trend coefficients results in a p -value of $< .001$.

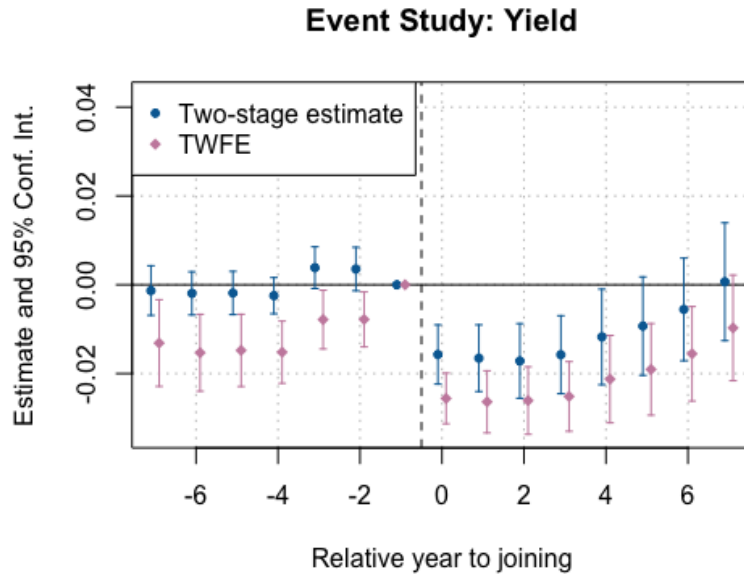


Figure 10. Event Study: Yield

Notes: Event study shows dynamic two-way fixed effects and Gardner (2022) two-stage difference-in-differences estimates of joining the Common App on log applications. A Wald test of joint nullity of the two-stage estimate pre-trend coefficients results in a p -value of .011.

point increase in Common App adoption among competitor schools, weighted by enrollment, is associated with a 3.3 percent decrease in overall freshmen enrollment. The estimated coefficient on the interaction term in Model (2) suggests that the impact of joining the Common App on enrollment depends on the degree of Common App adoption among competitors. Colleges that join the Common App in markets with little existing Common App presence are estimated to grow their out-of-state enrollment, while joining colleges in markets with a high degree of Common App adoption are estimated to experience an increase in out-of-state enrollment. I provide enrollment results using only observations with non-zero international enrollment in Appendix B.

Table 6. EFFECTS OF THE COMMON APP ON ENROLLMENT

	(1) Enroll	(2) In-State Enroll	(3) Out-of-State Enroll	(4) Int'l Enroll	(5) Enroll	(6) In-State Enroll	(7) Out-of-State Enroll	(8) Int'l Enroll
CA Membership	0.033** (0.014)	0.006 (0.013)	0.001 (0.021)	0.106*** (0.037)	0.020 (0.019)	-0.033* (0.017)	0.057* (0.030)	0.094* (0.055)
Comp. Share CA					-0.330*** (0.066)	-0.330*** (0.066)	-0.140 (0.097)	-0.531*** (0.162)
CA Membership × Comp. Share CA					0.070 (0.054)	0.167*** (0.052)	-0.164** (0.082)	0.113 (0.153)
<i>Postestimation</i>								
Effect of joining if Comp. Share CA = .5					0.055	0.050	-0.025	0.150
[p value]					.004	.009	.387	.003
Observations	29,722	22,045	21,610	16,889	29,722	22,045	21,610	16,889
Institutions	1,645	1,645	1,645	1,645	1,645	1,645	1,645	1,645
Year FE	X	X	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X	X	X

Notes: Columns 1–4 report separate regression results using Model (1). Columns 5–8 report separate regression results using Model (2). CA is defined as Common App membership and Comp. Share is defined as the percentage of students attending Common App member schools out of all students attending competitor schools in each college's market. Outcome variables are logged. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/*** denote significance at the 10/5/1 percent levels.

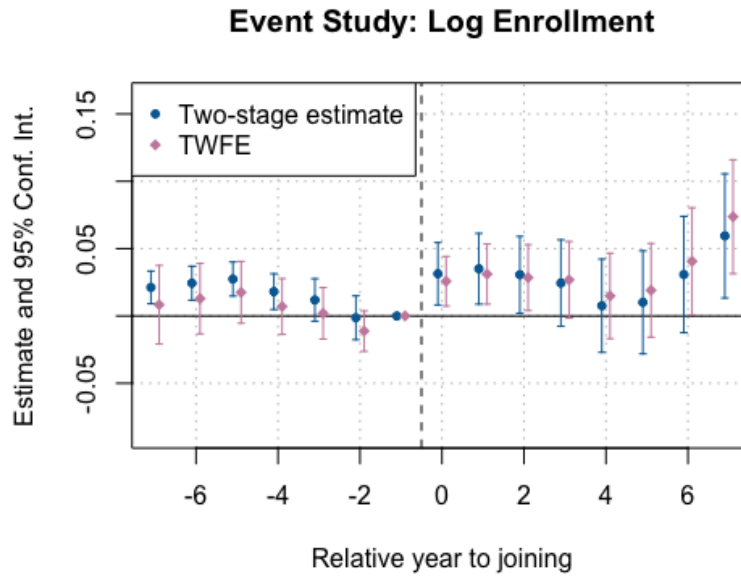


Figure 11. Event Study: Log Enrollment

Notes: Event study shows dynamic two-way fixed effects and Gardner (2022) two-stage difference-in-differences estimates of joining the Common App on log freshman enrollment. A Wald test of joint nullity of the two-stage estimate pre-trend coefficients results in a p -value of $< .001$.

Tuition and Financial Aid

Common App adoption is estimated to be negatively related to in-state tuition and positively related to out-of-state tuition, as displayed in Table 7. The estimated effect of Common App membership on in-state tuition is -3.3 percent. This negative relationship is driven by public colleges that may be joining the Common App instead of raising tuition prices for in-state students. The estimated effect on out-of-state tuition is 2.4 percent. Post-adoption estimates of the effect on out-of-state tuition have wide confidence intervals, but there is evidence of an overall positive effect. Institutional aid per student is estimated to increase by 6.1 percent following Common App adoption. Based on the event studies, these effects do not appear to be primarily driven by pre-existing trends. The estimated dynamic effects on institutional aid show a growing and lasting increase.

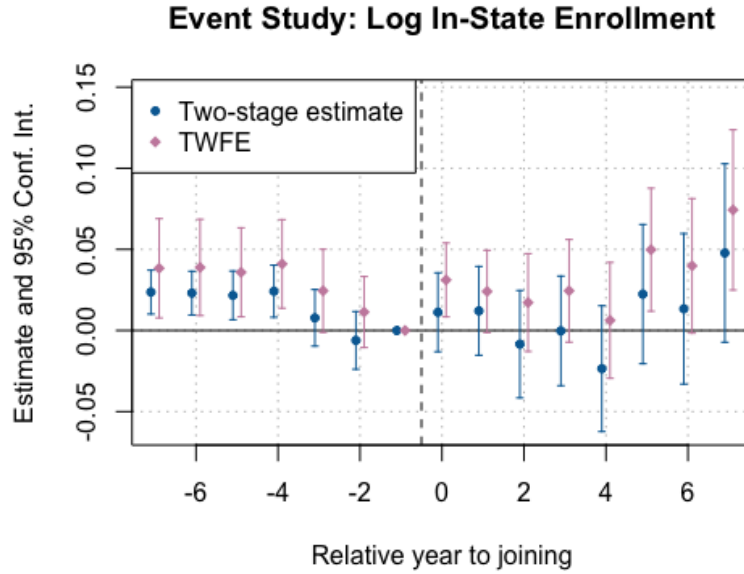


Figure 12. Event Study: Log In-State Enrollment

Notes: Event study shows dynamic two-way fixed effects and Gardner (2022) two-stage difference-in-differences estimates of joining the Common App on log in-state freshman enrollment. A Wald test of joint nullity of the two-stage estimate pre-trend coefficients results in a p -value of $< .001$.

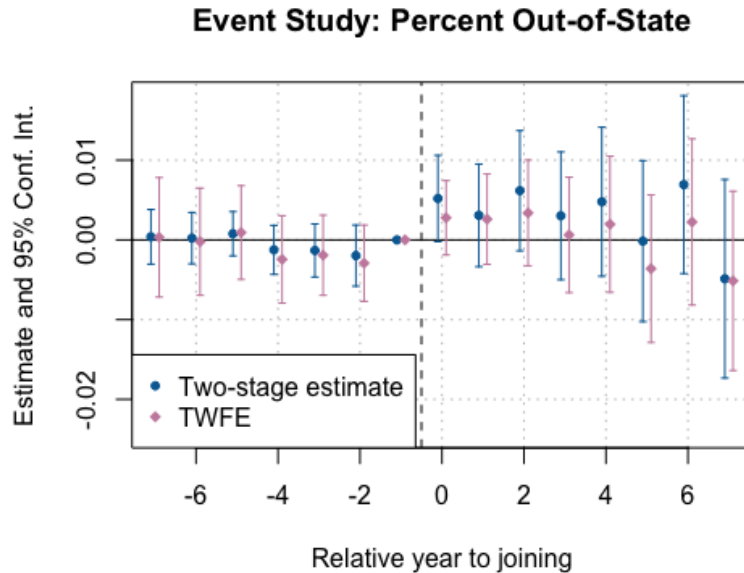


Figure 13. Event Study: Log Out-of-State Enrollment

Notes: Event study shows dynamic two-way fixed effects and Gardner (2022) two-stage difference-in-differences estimates of joining the Common App on log out-of-state freshman enrollment. A Wald test of joint nullity of the two-stage estimate pre-trend coefficients results in a p -value of $.005$.

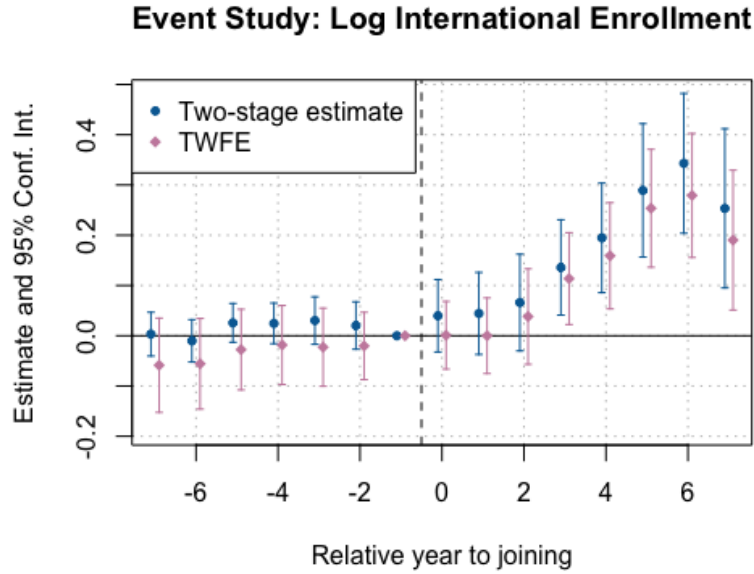


Figure 14. Event Study: Log International Enrollment

Notes: Event study shows dynamic two-way fixed effects and Gardner (2022) two-stage difference-in-differences estimates of joining the Common App on log international freshman enrollment. A Wald test of joint nullity of the two-stage estimate pre-trend coefficients results in a p -value of .488.

Consistent with the hypothesis that greater Common App presence adds competitive pressure, the estimate for in-state tuition is -0.48, corresponding with a decrease of 4.8 percent in in-state tuition for a 10 percentage point increase in Common App share of competitors for non-Common App schools. A positive relationship exists between Common App penetration and institutional aid per student, further decreasing the net price of attendance. There is an estimated negative effect on in-state tuition even for Common App schools without Common App presence among competitors. This supports the hypothesis that schools join the Common App when they cannot increase tuition. This limits the interpretation of these estimates as the causal effect of the Common App specifically.

Table 7. EFFECTS OF THE COMMON APP ON TUITION AND FINANCIAL AID

	(1) In-State Tuition	(2) Out-of-State Tuition	(3) Tuition Rev. Per FTE	(4) Inst. Aid Per FTE	(5) In-State Tuition	(6) Out-of-State Tuition	(7) Tuition Rev. Per FTE	(8) Inst. Aid Per FTE
CA Membership	-0.033* (0.017)	0.024** (0.012)	0.013 (0.009)	0.061*** (0.015)	-0.046* (0.027)	0.008 (0.017)	0.023* (0.013)	0.051*** (0.020)
Comp. Share CA					-0.477*** (0.103)	-0.015 (0.045)	-0.225*** (0.044)	0.226*** (0.063)
CA Membership × Comp. Share CA					0.064	0.047	-0.006	0.005
<i>Postestimation</i>								
Effect of joining if					(0.060)	(0.040)	(0.036)	(0.055)
Comp. Share CA					-0.013	0.031	0.020	0.054
= .5								
[p value]					.462	.033	.121	.006
Observations	21,424	21,424	30,243	29,374	21,415	21,415	30,230	29,371
Institutions	1,879	1,879	1,879	1,879	1,879	1,879	1,879	1,879
Year FE	X	X	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X	X	X

Notes: Columns 1–4 report separate regression results using Model (1). Columns 5–8 report separate regression results using Model (2). CA is defined as Common App membership and Comp. Share is defined as the percentage of students attending Common App member schools out of all students attending competitor schools in each college's market. Outcome variables are logged. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/***/*** denote significance at the 10/5/1 percent levels.

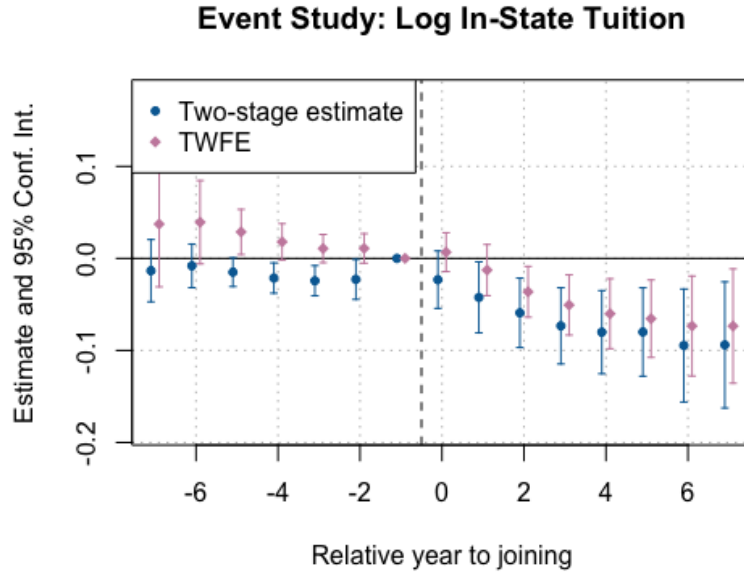


Figure 15. Event Study: Log In-State Tuition

Notes: Event study shows dynamic two-way fixed effects and Gardner (2022) two-stage difference-in-differences estimates of joining the Common App on log in-state published tuition. A Wald test of joint nullity of the two-stage estimate pre-trend coefficients results in a p -value of .003.

Additional Analysis and Robustness Checks

In the appendix, I provide result tables for additional outcomes on student composition and institutional success in Table 8 and Table 9. I find that joining the Common App in a market with high Common App adoption is associated with increases in SAT scores and slight increases in the percentage of students who are non-white or Pell Grant-eligible. Joining the Common App in a market with low adoption is associated with a slight increase in the share of out-of-state students. There are imprecise null effects of Common App membership on the first-year retention rate, graduation rate, and financial monitoring status.

I also consider the effect of Common App presence on enrollment at two-year colleges in Table 10. I find that a 10 percentage point increase in Common App adoption among four-year schools in the market is associated with a 4.2 decrease in enrollment, suggesting that

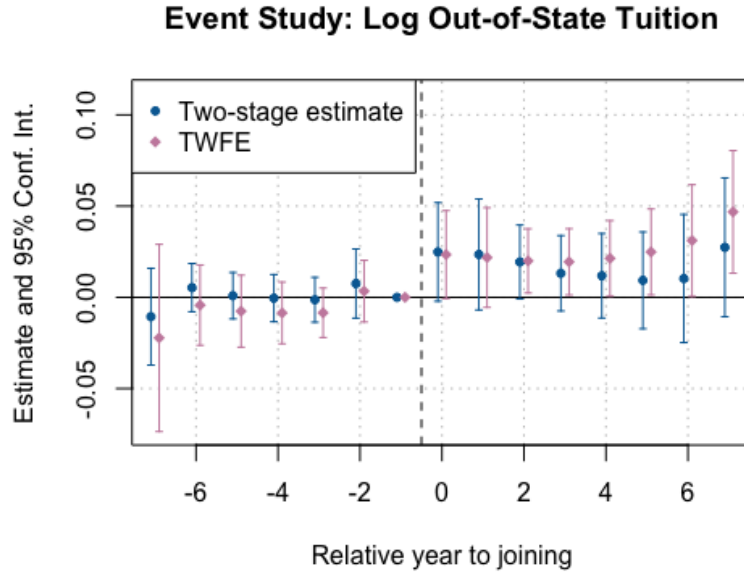


Figure 16. Event Study: Log Out-of-State Tuition

Notes: Event study shows dynamic two-way fixed effects and Gardner (2022) two-stage difference-in-differences estimates of joining the Common App on log out-of-state published tuition. A Wald test of joint nullity of the two-stage estimate pre-trend coefficients results in a p -value of .866.

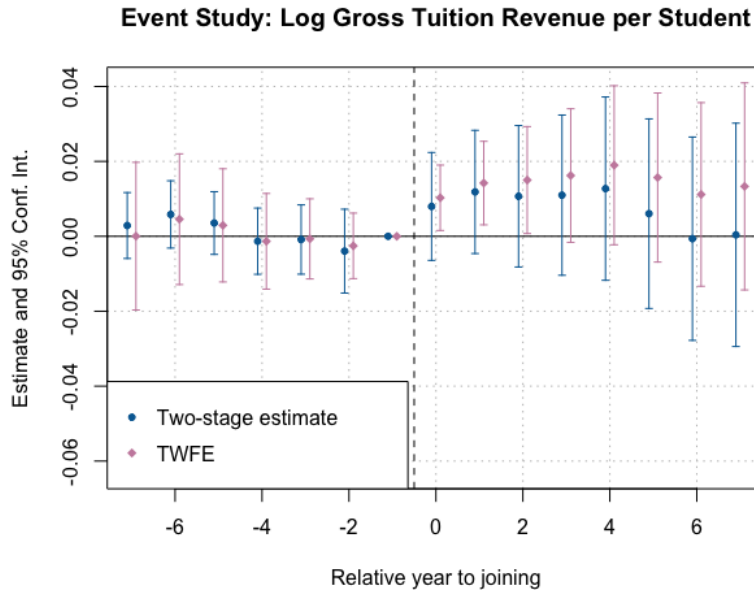


Figure 17. Event Study: Log Gross Tuition Revenue per Student

Notes: Event study shows dynamic two-way fixed effects and Gardner (2022) two-stage difference-in-differences estimates of joining the Common App on log gross tuition revenue per student. A Wald test of joint nullity of the two-stage estimate pre-trend coefficients results in a p -value of .813.

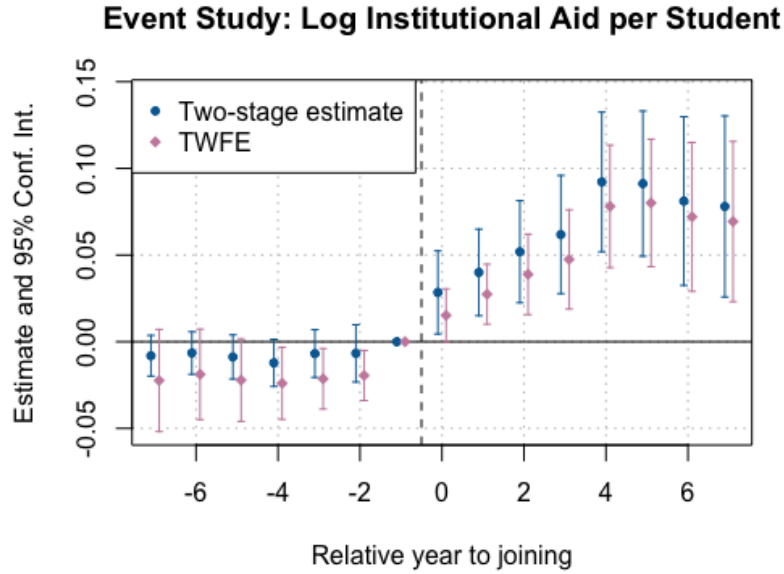


Figure 18. Event Study: Log Inst. Aid per Student

Notes: Event study shows dynamic two-way fixed effects and Gardner (2022) two-stage difference-in-differences estimates of joining the Common App on log institutional aid per student. A Wald test of joint nullity of the two-stage estimate pre-trend coefficients results in a p -value of .122.

Common App schools are attracting students away from two-year colleges or that markets with more Common App adoption are facing more enrollment decline across different types of schools. When I analyze graduate-level outcomes, I find that Common App adoption is associated with a 9.0 percent decrease in graduate student enrollment and a 18.8 percent decrease in graduate in-state tuition. If schools are attempting to increase undergraduate enrollment to compensate for revenue declines from graduate students, it would explain these relationships.

Next, I present results for various alternate model specifications and samples in the appendix. First, I compare TWFE estimates to static estimates using methods from Gardner (2022) and Sun and Abraham (2021) in Table 14. Estimated effects are generally the smallest with the TWFE method. Next, I add linear state-time trends to Model (1) and Model (2). The estimates in Table 15, Table 16, and Table 17 generally have larger magnitudes than

in the primary analysis. The following tables, Table 18, Table 19, and Table 20, display the regression results when a college's market competitors are defined as those in the same state, sector, and selectivity level instead of all other four-year colleges in the same state.

Finally, I show results when restricting or expanding the sample of colleges used in the analysis. I first follow a robustness check used by Knight and Schiff (2022) and exclude colleges that never join the Common App in Table 21, 22, and 23. I then return to my primary sample, but additionally include colleges that were members of the Common App prior to 2004. The results for this sample are displayed in Table 24, Table 25, and Table 26. Neither of these alternative samples considerably change the results discussed above.

CONCLUSION

Today's higher education landscape offers students more choices than ever. In 1967, fewer than 20 percent of students submitted four or more college applications (Pryor et al., 2007). By contrast, the average student who used the Common App last year applied to more than six colleges (The Common Application, 2025a). Students now consider colleges far from home in their application process, and approximately one-fifth of students exclusively enrolled in online classes, which allows maximum geographical flexibility (Coffey, 2024). These trends are reshaping the market in emerging ways. As colleges face growing financial challenges, a deeper understanding of how to adapt and remain competitive is essential.

This paper considers the effects of Common App adoption among four-year colleges using data from IPEDS and the Common App. Employing a staggered difference-in-differences approach, I replicate previous findings on the impact of a centralized admissions platform on admissions and enrollment. Importantly, these effects are not uniform across all markets. How Common App membership affects an institution can depend on the share of Common App adoption among competitor schools. I present new evidence that greater adoption of the Common App contributes to stratification as potential students are drawn away from non-Common App schools. I also find that greater Common App market penetration is associated with lower in-state tuition prices and higher levels of institutional aid, underscoring the importance of evaluating how colleges may select into strategies and policies.

Future research could further investigate how colleges choose to adopt the Common App or other institutional policies. There is also room for additional analysis on the interplay between college policies, enrollment, and market dynamics. More granular data on tuition and financial aid data by residency status would allow for a detailed breakdown of how the Common App and other admissions policies may impact groups of students differently. The

key implication for colleges is that while joining the Common App could have beneficial effects on the admissions process and recruitment, it is not a cure-all for financial challenges as markets continue to become competitive. Policymakers should recognize interventions that improve outcomes at certain schools may create spillover effects in other schools, and that the broader impact on the market should be considered.

REFERENCES CITED

- Bennett, Christopher T. (2022) “Untested Admissions: Examining Changes in Application Behaviors and Student Demographics Under Test-Optional Policies,” *American Educational Research Journal*, 59 (1), 180–216, <https://doi.org/10.3102/00028312211003526>.
- Blom, Erica, Kelia Washington, Macy Rainer, Carina Chien, and Robert Kelchen (2020) *IPEDS Finance User Guide*, Urban Institute.
- Bound, John and Andrew Simon (2024) “College Choice, Private Options, and the Incidence of Public Investment in Higher Education,” *Journal of Human Resources*, 60 (2).
- Brenan, Megan (2023) “Americans’ Confidence in Higher Education Down Sharply,” <https://news.gallup.com/poll/508352/americans-confidence-higher-education-down-sharply.aspx>.
- Butts, Kyle (2021) *did2s: Two-Stage Difference-in-Differences Following Gardner (2021)*, <https://github.com/kylebutts/did2s/>.
- Coalition for College (2025) , <https://www.coalitionforcollegeaccess.org/>.
- Coffey, Lauren (2024) “Students Distancing From Distance Learning,” <https://www.insidehighered.com/news/tech-innovation/teaching-learning/2024/01/30/online-college-enrollment-continues-post-pandemic#>.
- Common Black College Application (2025) , <https://commonblackcollegeapp.com/>.
- Commonfund Institute (2024) “Commonfund Higher Education Price Index: 2024 Update,” <https://www.commonfund.org/higher-education-price-index>.
- Cook, Emily E. and Sarah Turner (2022) “Progressivity of pricing at US public universities,” *Economics of Education Review*, 88, 102239, <https://doi.org/10.1016/j.econedurev.2022.102239>.
- Curs, Bradley and Larry Singell (2010) “Aim High or Go Low? Pricing Strategies and Enrollment Effects When the Net Price Elasticity Varies with Need and Ability,” *The Journal of Higher Education*, 81, 515–543, 10.1080/00221546.2010.11779063.
- Deming, David J., Michael Lovenheim, and Richard Patterson (2019) *The Competitive Effects of Online Education*, Chap. 8: University of Chicago Press.
- Douglas-Gabriel, Danielle and Susan Svrluga (2024) “More elite universities settle suit over alleged ‘price-fixing’ aid policies,” <https://www.washingtonpost.com/education/2024/01/24/colleges-price-fixing-financial-aid-settlement/>.
- Fillmore, Ian (2022) “Price Discrimination and Public Policy in the US College Market,” *The Review of Economic Studies*, 90 (3).

- Gardner, John (2022) “Two-stage differences in differences,” <https://arxiv.org/abs/2207.05943>.
- Goodman-Bacon, Andrew (2021) “Difference-in-differences with variation in treatment timing,” *Journal of Econometrics*, 225 (2), 10.1016/j.jeconom.2021.03.014.
- Internet Archive (2024) “Wayback Machine,” https://web.archive.org/web/20250000000000*/commonapp.org/explore.
- Jaquette, Ozan and Edna E. Parra (2013) “Using IPEDS for Panel Analyses: Core Concepts, Data Challenges, and Empirical Applications,” in Paulson, Michael B. ed. *Higher Education: Handbook of Theory and Research*, 29, 467–533: Springer, Dordrecht, https://link.springer.com/chapter/10.1007/978-94-017-8005-6_11.
- Kelchen, Robert and Sarah Pingel (2024) “Examining the Effects of Tuition Controls on Student Enrollment,” *Research in Higher Education*, 65 (1), 70–91, 10.1007/s11162-023-09748-.
- Kelchen, Robert, Dubravka Ritter, and Douglas Webber (2025) “Predicting College Closures and Financial Distress,” in *Finance and Economics Discussion Series (FEDS) 2005-003*: Washington: Board of Governors of the Federal Reserve System.
- Knight, Brian and Nathan Schiff (2021) “The Common Application and Student Choice,” *AEA Papers and Proceedings*, 111, 460–64, 10.1257/pandp.20211042.
- (2022) “Reducing Frictions in College Admissions: Evidence from the Common Application,” *American Economic Journal: Economic Policy*, 14, 179–206.
- Kunkle, Kelsey (2023) “State Higher Education Finance: FY 2023,” <https://shef.sheeo.org/report/>.
- Lane, Patrick, Colleen Falkenstern, and Peace Bransberger (2024) “Knocking at the College Door: Projections of High School Graduates,” <https://www.wiche.edu/resources/knocking-at-the-college-door-11th-edition/>.
- Ling, Yun (2019) “The Effects of Common Application on Student Applications and Prices of Private Universities,” <https://sites.google.com/view/yling/home>.
- McMillen, Daniel P., Larry D. Singell, and Glen R. Waddell (2007) “Spatial Competition And The Price Of College,” *Economic Inquiry*, 45 (4), 817–833, 10.1111/j.1465-7295.2007.
- National Center for Education Statistics (2023) “IPEDS : Integrated Postsecondary Education Data System,” <https://nces.ed.gov/ipeds/>, accessed on November 20, 2024.
- (2024) “Condition of Education: College Enrollment Rates,” <https://nces.ed.gov/programs/coe/indicator/cpb/college-enrollment-rate>.

- Odle, Taylor and Jennifer Delaney (2025a) “Experimental Evidence on ”Direct Admissions” from Four States: Impacts on College Application and Enrollment,” 10.26300/6xtn-2j84.
- (2025b) “State-Level Common Application Policies and College Enrollment,” *Education Finance and Policy*, 20 (1), 164–177, 10.1162/edfp_a.00439.
- Office of Federal Student Aid (2024a) “Heightened Cash Monitoring,” <https://studentaid.gov/data-center/school/hcm>, accessed on March 10, 2025.
- (2024b) “Institutions on Heightened Cash Monitoring,” <https://catalog.data.gov/dataset/institutions-on-heightened-cash-monitoring>, accessed on March 10, 2025.
- Orlova, Natalia, Derek Rury, and Justin C. Wiltshire (2023) “Out-of-State Enrollment, Financial Aid and Academic Outcomes: Evidence from Wisconsin,” *EdWorkingPaper*, 39 (23-840).
- Page, Darren (2024) “College applications and enrollment effects of the Common Application,” *Contemporary Economic Policy*, 42 (2), 237–258, <https://doi.org/10.1111/coep.12632>.
- Pryor, John H., Sylvia Hurtado, Victor B. Saenz, José Luis Santos, and William S. Korn (2007) “The American Freshman: Forty Year Trends.”
- Russell, Lauren (2021) “Price Effects of Nonprofit College and University Mergers,” *The Review of Economics and Statistics*, 103 (1), 88–101.
- Saboe, Matt and Sabrina Terrizzi (2019) “SAT optional policies: Do they influence graduate quality, selectivity or diversity?” *Economics Letters*, 174, 13–17, <https://www.sciencedirect.com/science/article/pii/S0165176518304300>.
- Smith, Jonathan (2014) “The Effect of College Applications on Enrollment,” *B.E. Journal of Economic Analysis & Policy*, 14 (1), 151–188, 10.1515/bejeap-2013-0002.
- Smith, Jonathan, Matea Pender, and Jessica Howell (2018) “Competition among Colleges for Students across the Nation,” *Southern Economic Journal*, 84 (3), 849–878, 10.1002/soej.12246.
- Sun, Liyang and Sarah Abraham (2021) “Estimating dynamic treatment effects in event studies with heterogeneous treatment effects,” *Journal of Econometrics*, 225 (2), 175–199, <https://www.sciencedirect.com/science/article/pii/S030440762030378X>, Themed Issue: Treatment Effect 1.
- The Common Application (2025a) “Explore colleges,” <https://www.commonapp.org/explore/>.
- (2025b) “Pricing & fees,” <https://membersupport.commonapp.org/s/pricing>.

- Urban Institute (2023) “Integrated Postsecondary Education Data System, via Education Data Portal,” https://educationdata.urban.org/documentation/colleges.html#ipeds_directory, accessed on September 25, 2024.
- U.S. News & World Report (2024) “Best National University Rankings,” https://www.usnews.com/best-colleges/rankings/national-universities?_sort=rank&_sortDirection=asc.
- Winters, John V. (2012) “Cohort crowding and nonresident college enrollment,” *Economics of Education Review*, 31 (3), 30–40, <https://doi.org/10.1016/j.econedurev.2012.01.001>.

APPENDICES

APPENDIX A

ADDITIONAL RESULTS AND FIGURES

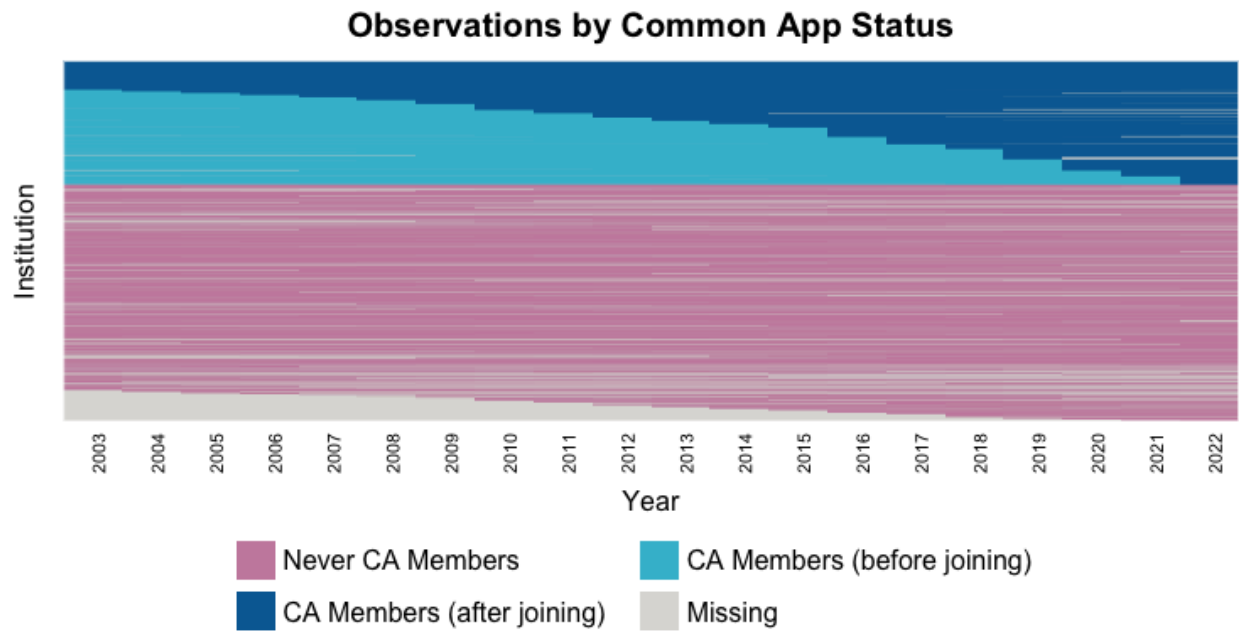


Figure 19. Observations by Common App Status

Notes: Figure shows each institution's observations over time by Common App status. Colleges that are CA Members (after joining) in 2003 are omitted from the primary sample of analysis.

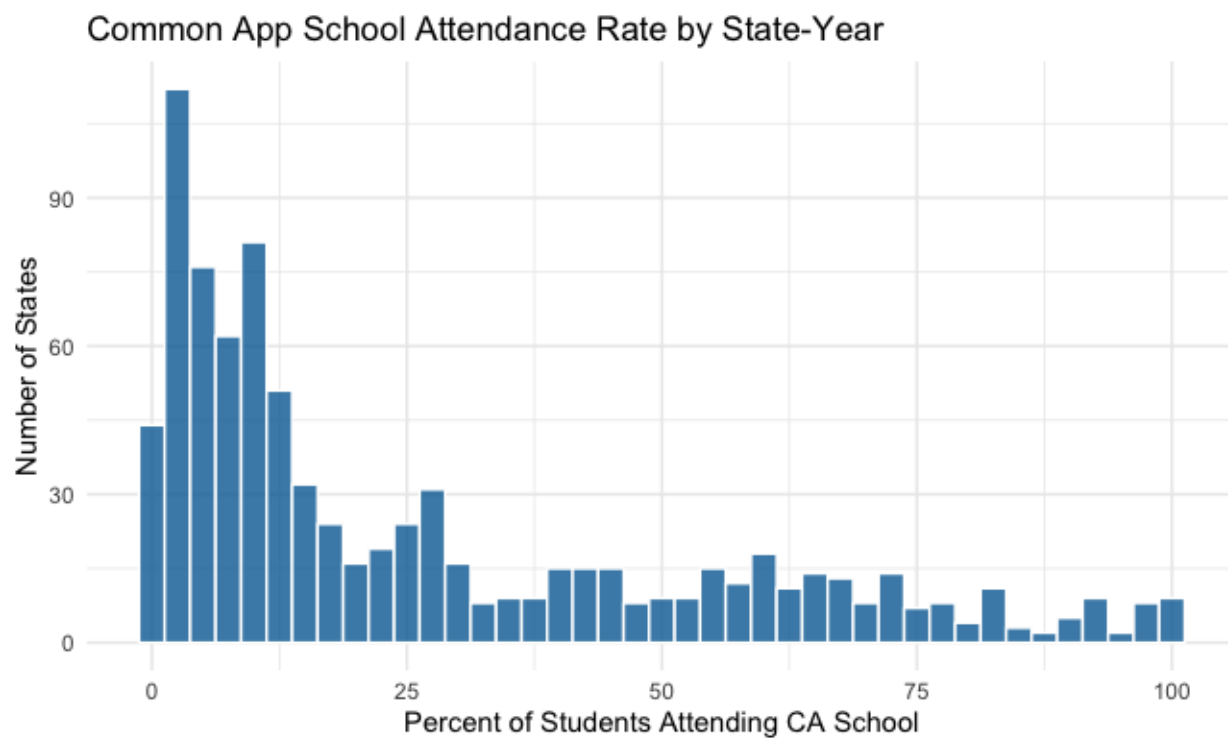


Figure 20. Percent Students Attending Common App Schools Histogram

Notes: Figure shows the distribution of the percentage of undergraduates attending Common App schools at the state-year level of observation. The histogram excludes observations with zero percent Common App attendance.

Table 8. EFFECTS OF THE COMMON APP ON STUDENT COMPOSITION

	(1) SAT 75th %ile	(2) Percent Non-white	(3) Percent Pell	(4) Percent Out-of-State	(5) SAT 75th %ile	(6) Percent Non-white	(7) Percent Pell	(8) Percent Out-of-State
CA Membership	3.646*** (1.016)	0.008** (0.003)	0.000 (0.003)	0.002 (0.003)	-0.447 (1.525)	-0.003 (0.005)	-0.016*** (0.004)	0.015*** (0.005)
Comp. Share CA					-0.796 (4.858)	-0.037** (0.015)	-0.028** (0.013)	0.012 (0.015)
CA Membership × Comp. Share CA					13.059***	0.038***	0.051***	-0.044***
<i>Postestimation</i>								
Effect of joining if Comp. Share CA = .5					(4.332)	(0.013)	(0.010)	(0.013)
					6.083	0.016	0.010	-0.007
<i>[p value]</i>					i.001	i.001	.009	.116
Observations	19,708	25,183	18,814	18,905	19,705	25,183	18,814	18,905
Institutions	1,332	1,332	1,332	1,332	1,332	1,332	1,332	1,332
Year FE	X	X	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X	X	X

Notes: Columns 1–4 report separate regression results using Model (1). Columns 5–8 report separate regression results using Model (2). CA is defined as Common App membership and Comp. Share is defined as the percentage of students attending Common App member schools out of all students attending competitor schools in each college's market. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/***/ denote significance at the 10/5/1 percent levels.

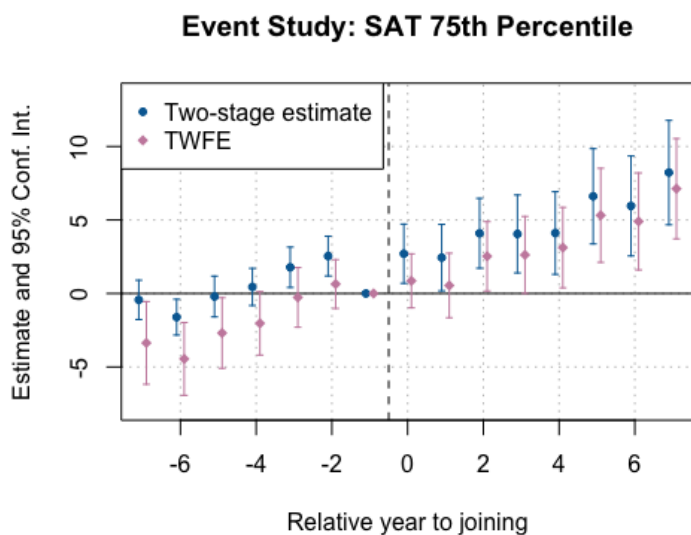


Figure 21. Event Study: SAT 75th Percentile

Notes: Event study shows dynamic two-way fixed effects and Gardner (2022) two-stage difference-in-differences estimates of joining the Common App on the 75th percentile of SAT scores of enrolled students. A Wald test of joint nullity of the two-stage estimate pre-trend coefficients results in a p -value of $< .001$.

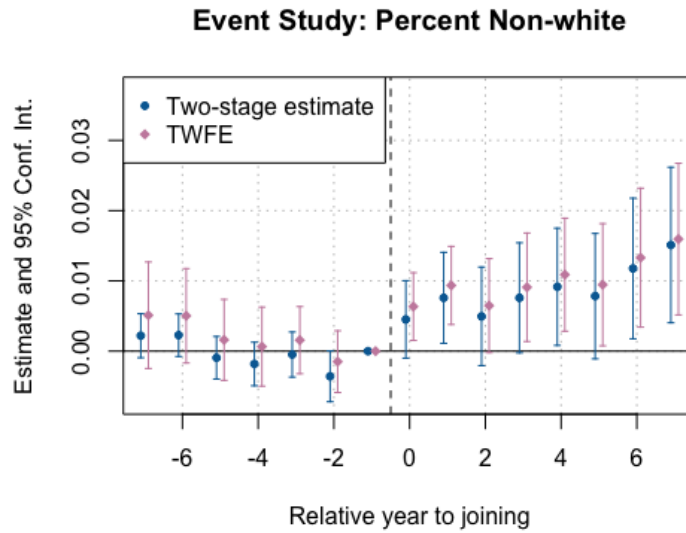


Figure 22. Event Study: Percent Non-white

Notes: Event study shows dynamic two-way fixed effects and Gardner (2022) two-stage difference-in-differences estimates of joining the Common App on the percent of freshman students who are non-white. A Wald test of joint nullity of the two-stage estimate pre-trend coefficients results in a p -value of .359.

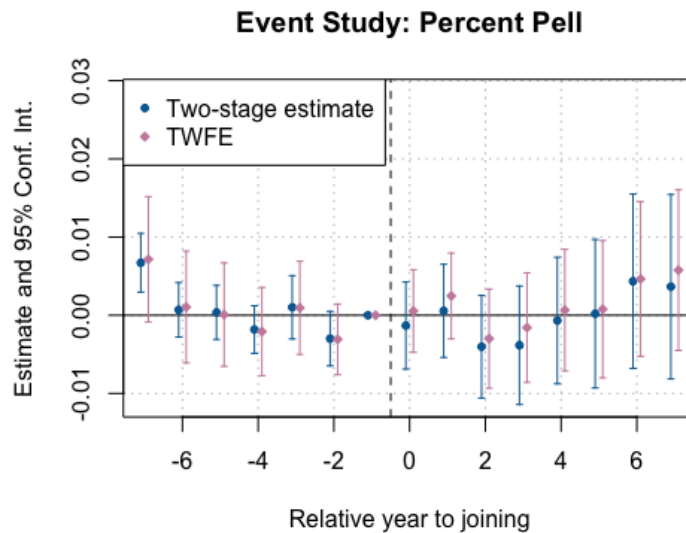


Figure 23. Event Study: Percent Pell

Notes: Event study shows dynamic two-way fixed effects and Gardner (2022) two-stage difference-in-differences estimates of joining the Common App on the percent of undergraduate students who are Pell-grant eligible. A Wald test of joint nullity of the two-stage estimate pre-trend coefficients results in a p -value of .025.

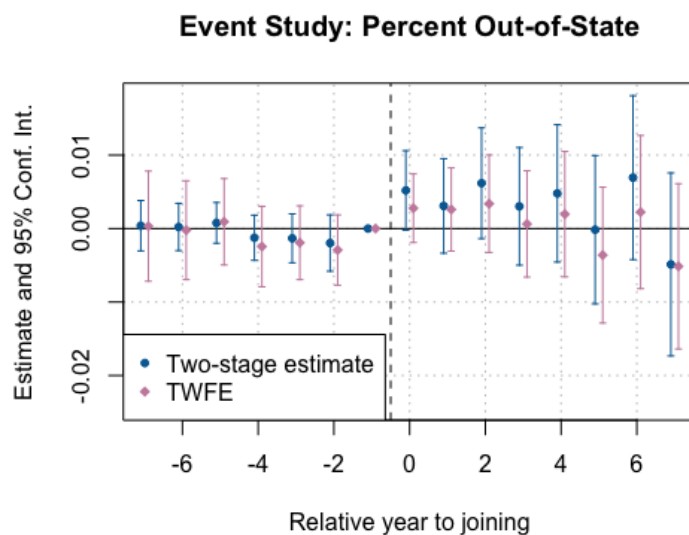


Figure 24. Event Study: Percent Out-of-State

Notes: Event study shows dynamic two-way fixed effects and Gardner (2022) two-stage difference-in-differences estimates of joining the Common App on the percent of freshman students who are domestic out-of-state students. A Wald test of joint nullity of the two-stage estimate pre-trend coefficients results in a p -value of .883.

Table 9. EFFECTS OF THE COMMON APP ON OTHER INSTITUTIONAL OUTCOMES

	(1) Retention Rate	(2) Graduation Rate	(3) Financial Monitoring	(4) Retention Rate	(5) Graduation Rate	(6) Financial Monitoring
CA Membership	0.000 (0.003)	0.008** (0.003)	-0.002 (0.010)	0.003 (0.004)	0.010** (0.005)	0.002 (0.15)
Comp. Share CA				-0.006 (0.014)	0.041 (0.042)	-0.050 (0.041)
CA Membership × Comp. Share CA				-0.011 (0.010)	-0.016 (-0.020)	-0.009 (0.041)
<i>Postestimation</i>						
Effect of joining if Comp. Share CA = .5				-0.002	0.002	-0.002
[p value]				.546	.827	.849
Observations	22,269	14,771	16,340	22,269	14,770	14,457
Institutions	1,906	1,631	2,268	1,906	1,631	2,268
Year FE	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X

Notes: Columns 1–3 report separate regression results using Model (1). Columns 4–6 report separate regression results using Model (2). CA is defined as Common App membership and Comp. Share is defined as the percentage of students attending Common App member schools out of all students attending competitor schools in each college’s market. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/***/*** denote significance at the 10/5/1 percent levels.

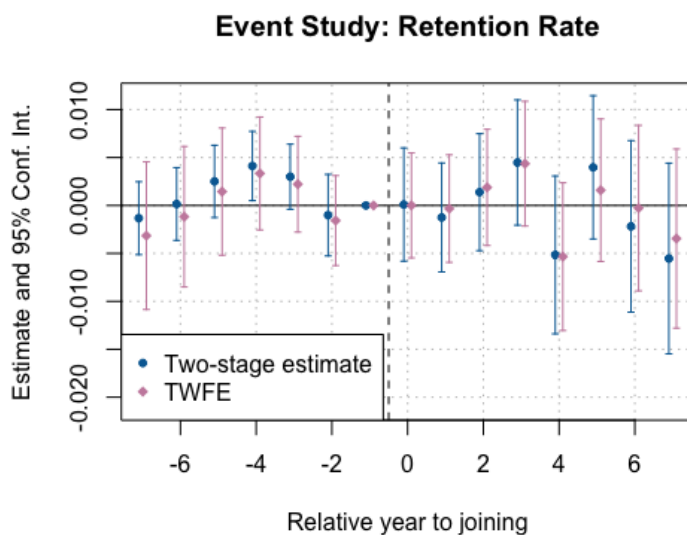


Figure 25. Event Study: Retention Rate

Notes: Event study shows dynamic two-way fixed effects and Gardner (2022) two-stage difference-in-differences estimates of joining the Common App on the freshman retention rate lagged one year. A Wald test of joint nullity of the two-stage estimate pre-trend coefficients results in a p -value of .246.

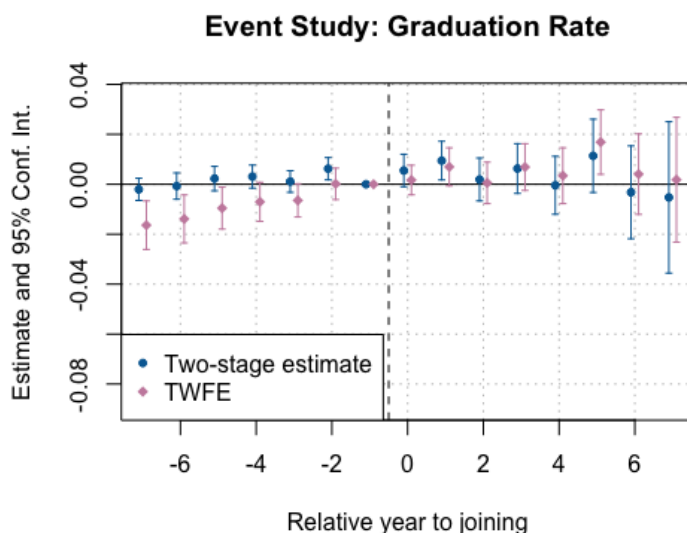


Figure 26. Event Study: Graduation Rate

Notes: Event study shows dynamic two-way fixed effects and Gardner (2022) two-stage difference-in-differences estimates of joining the Common App on the 6-year graduation rate of the year's cohort. A Wald test of joint nullity of the two-stage estimate pre-trend coefficients results in a p -value of .053.

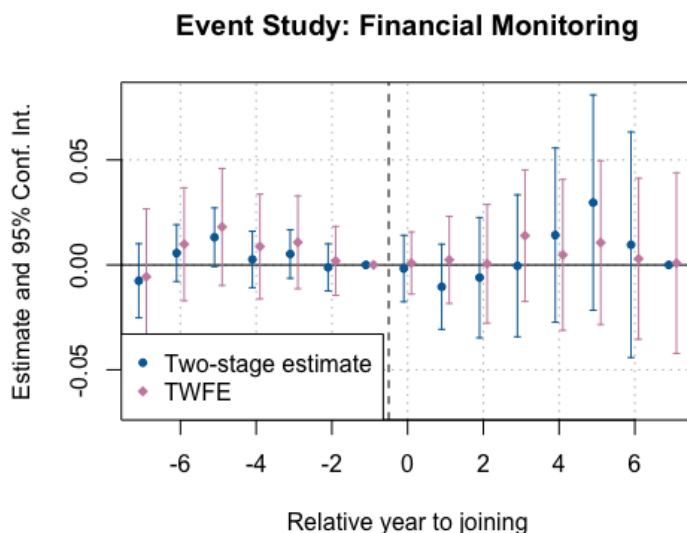


Figure 27. Event Study: Financial Monitoring

Notes: Event study shows dynamic two-way fixed effects and Gardner (2022) two-stage difference-in-differences estimates of joining the Common App on the institution's Heightened Cash Monitoring status. A Wald test of joint nullity of the two-stage estimate pre-trend coefficients results in a p -value of .564.

Table 10. EFFECT OF COMMON APP COMPETITION SHARE ON TWO-YEAR COLLEGES

	Log Enrollment
Comp. Share CA	-0.417*** (0.075)
Observations	20,564
Institutions	1,336
Year FE	X
Institution FE	X

Notes: Comp. Share is defined as the percentage of students attending Common App member schools out of all students attending competitor schools in each college's market. Data comes from IPEDS and the Common App. Standard errors clustered at the institution level are shown in parentheses. */**/** denote statistical significance at the 10/5/1 percent levels.

Table 11. ESTIMATES OF COMMON APP EFFECTS BY TYPE OF COLLEGE

	(1)	(2)	(3)	(4)
	Public Select	Public Not Select	Private Select	Private Not Select
Log Applications	0.071 (0.052)	0.063** (0.025)	0.324*** (0.073)	0.154*** (0.028)
Log Acceptances	0.048 (0.060)	0.053** (0.023)	0.164** (0.075)	0.189*** (0.026)
Yield	0.003 (0.015)	-0.003 (0.006)	-0.006 (0.019)	-0.019*** (0.005)
Log Enrollment	0.015 (0.053)	0.046** (0.019)	0.117** (0.051)	0.040* (0.022)
Log In-State Enroll	0.011 (0.057)	0.023 (0.017)	0.100* (0.052)	0.001 (0.020)
Log Out-of-State Enroll	-0.060 (0.086)	-0.023 (0.034)	0.009 (0.066)	0.034 (0.028)
Log Int'l Enroll	0.029 (0.126)	0.009 (0.073)	0.389*** (0.114)	0.138*** (0.046)
Log In-State Tuition	-0.414*** (0.134)	-0.049 (0.038)	0.023 (0.063)	0.021*** (0.007)
Log Out-of-State Tuition	-0.046 (0.035)	0.044 (0.029)	0.023 (0.063)	0.020*** (0.007)
Log Tuition Rev. per FTE	0.002 (0.055)	-0.007 (0.013)	0.055 (0.039)	0.027** (0.012)
Log Inst. Aid per FTE	-0.012 (0.038)	-0.022 (0.015)	-0.028 (0.052)	0.074*** (0.020)
SAT 75th Percentile	0.146 (3.315)	-0.248 (1.696)	9.942*** (3.490)	6.938*** (1.447)
Percent Non-white	0.036*** (0.012)	0.009* (0.005)	-0.004 (0.011)	0.021*** (0.005)
Percent Pell	0.012 (0.009)	0.009* (0.005)	-0.004 (0.010)	0.008* (0.004)
Percent Out-of-State	-0.005 (0.009)	-0.002 (0.004)	-0.011 (0.010)	0.009* (0.005)
Retention Rate	-0.010 (0.006)	-0.001 (0.003)	-0.011 (0.010)	0.004 (0.004)
Graduation Rate	0.006 (0.007)	0.009 (0.008)	0.014 (0.009)	0.012** (0.005)
Financial Monitoring	0.016 (0.011)	0.015* (0.009)	-0.033 (0.038)	-0.011 (0.019)
<i>N</i>	115	671	226	1,114

Notes: Table presents estimates of joining the Common App on outcomes by subgroup. CA is defined as Common App membership and Comp. Share is defined as the percentage of students attending Common App member schools out of all students attending competitor schools in each college's market. Selective schools are defined as the 20 percent of schools in the same sector with the lowest acceptance rate in 2003 or earliest observation.

Table 12. EFFECTS OF THE COMMON APP ON GRADUATE-LEVEL OUTCOMES

	(1) Enroll	(2) In-State Tuition	(3) Out-of-State Tuition	(4) Enroll	(5) In-State Tuition	(6) Out-of-State Tuition
CA Membership	-0.090*** (0.026)	-0.188*** (0.036)	-0.012 (0.019)	0.009 (0.036)	-0.233*** (0.063)	0.040 (0.030)
Comp. Share CA				-0.056 (0.126)	-1.630*** (0.285)	0.061 (0.087)
CA Membership × Comp. Share CA				-0.189* (0.103)	0.248** (0.123)	-0.171** (0.074)
Observations	30,924	28,801	28,801	26,419	24,860	24,860
Institutions	1,957	1,924	1,924	1,957	1,924	1,924
Year FE	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X

Notes: Columns 1–3 report separate regression results using Model (1). Columns 4–6 report separate regression results using Model (2). CA is defined as Common App membership and Comp. Share is defined as the percentage of students attending Common App member schools out of all students attending competitor schools in each college's market. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/***/ denote significance at the 10/5/1 percent levels.

APPENDIX B

ALTERNATE SPECIFICATIONS

Table 13. EFFECTS OF THE COMMON APP ON ENROLLMENT: SAME NUMBER OF OBSERVATIONS

	(1) Enroll	(2) In-State Enroll	(3) Out-of-State Enroll	(4) Int'l Enroll	(5) Enroll	(6) In-State Enroll	(7) Out-of-State Enroll	(8) Int'l Enroll
CA Membership	-0.006 (0.011)	-0.019 (0.012)	-0.022 (0.020)	0.099*** (0.037)	-0.016 (0.016)	-0.053*** (0.017)	0.036 (0.030)	0.087 (0.055)
Comp. Share CA					-0.343*** (0.056)	-0.371*** (0.060)	-0.117 (0.103)	0.505*** (0.163)
CA Membership $\times$ Comp. Share CA					0.078	0.166***	-0.181**	0.110
<i>Postestimation</i>					(0.048)	(0.052)	(0.083)	(0.154)
Effect of joining if Comp. Share CA = .5					0.023	0.030	-0.055	0.142
[p value]					.148	.096	.058	.006
Observations	16,674	16,674	16,674	16,674	16,674	16,674	16,674	16,674
Institutions	1,620	1,620	1,620	1,620	1,620	1,620	1,620	1,620
Year FE	X	X	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X	X	X

Notes: Sample is restricted to only observations with non-zero international enrollment. Columns 1–4 report separate regression results using Model (1). Columns 5–8 report separate regression results using Model (2). CA is defined as Common App membership and Comp. Share is defined as the percentage of students attending Common App member schools out of all students attending competitor schools in each college's market. Outcome variables are logged. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/***/*** denote significance at the 10/5/1 percent levels.

Table 14. ESTIMATES OF COMMON APP EFFECTS BY METHOD

	(1) TWFE	(2) Gardner (2022)	(3) Sun and Abraham (2021)
Log Applications	0.140*** (0.018)	0.165*** (0.022)	0.192*** (0.020)
Log Acceptances	0.136*** (0.018)	0.148*** (0.022)	0.166*** (0.020)
Yield	-0.012*** (0.004)	-0.003 (0.005)	-0.011** (0.004)
Log Enrollment	0.033** (0.014)	0.044*** (0.017)	0.049*** (0.015)
Log In-State Enroll	0.006 (0.013)	0.019 (0.015)	0.037** (0.014)
Log Out-of-State Enroll	0.001 (0.021)	-0.008 (0.023)	0.001 (0.020)
Log Int'l Enroll	0.106*** (0.037)	0.173*** (0.043)	0.130*** (0.043)
Log In-State Tuition	-0.033* (0.017)	-0.063*** (0.020)	-0.025** (0.010)
Log Out-of-State Tuition	0.024* (0.012)	0.022** (0.030)	0.002 (0.007)
Log Tuition Rev. per FTE	0.013 (0.009)	0.001 (0.011)	0.007 (0.009)
Log Inst. Aid per FTE	0.061*** (0.015)	0.061*** (0.018)	0.043*** (0.015)
SAT 75th Percentile	3.658*** (1.016)	5.340*** (1.231)	4.459*** (1.191)
Percent Non-white	0.008** (0.003)	0.012*** (0.004)	0.015*** (0.004)
Percent Pell	0.000 (0.003)	0.001 (0.003)	-0.000 (0.003)
Percent Out-of-State	0.002 (0.003)	0.001 (0.003)	-0.003 (0.003)
Retention Rate	0.000 (0.003)	-0.002 (0.003)	0.003 (0.002)
Graduation Rate	0.008** (0.003)	0.005 (0.004)	0.007* (0.004)
Financial Monitoring	-0.002 (0.010)	0.000 (0.011)	-0.001 (0.006)

Notes: Table presents estimates of joining the Common App on outcomes. Estimates in column 1 result from the use of Model (1). Estimates in column 2 result from the two-stage estimation approach proposed by Gardner (2022). Estimates in column 3 are the total average treatment effect for the treated using the Sun and Abraham (2021) method. */**/** denote statistical significance at the 10/5/1 percent levels.

Table 15. EFFECTS OF THE COMMON APP ON ADMISSIONS WITH STATE-TIME TRENDS

	(1)	(2)	(3)	(4)	(5)	(6)
	Applications	Acceptances	Yield	Applications	Acceptances	Yield
CA Membership	0.169*** (0.019)	0.157*** (0.018)	-0.017*** (0.004)	0.093*** (0.025)	0.073*** (0.024)	-0.020*** (0.006)
Comp. Share CA				-0.143* (0.082)	-0.076 (0.078)	-0.038** (0.017)
CA Membership × Comp. Share CA				0.243***	0.269***	0.010
<i>Postestimation</i>				(0.078)	(0.075)	(0.016)
Effect of joining if Comp. Share CA = .5				0.215	0.207	-0.015
[p value]				.001	.001	.002
Observations	27,425	27,368	27,293	27,406	27,353	27,279
Institutions	1,691	1,691	1,691	1,691	1,691	1,691
State-Time Trends	X	X	X	X	X	X
Year FE	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X

Notes: Columns 1–3 report separate regression results using Model (1) including linear state-time trends. Columns 4–6 report separate regression results using Model (2) including linear state-time trends. CA is defined as Common App membership and Comp. Share is defined as the percentage of students attending Common App member schools out of all students attending competitor schools in each college's market. Applications and acceptances are logged variables. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/*** denote significance at the 10/5/1 percent levels.

Table 16. EFFECTS OF THE COMMON APP ON ENROLLMENT WITH STATE-TIME TRENDS

	(1) Enroll	(2) In-State Enroll	(3) Out-of-State Enroll	(4) Int'l Enroll	(5) Enroll	(6) In-State Enroll	(7) Out-of-State Enroll	(8) Int'l Enroll
CA Membership	0.056*** (0.015)	0.024* (0.014)	0.030 (0.021)	0.110*** (0.036)	0.002 (0.019)	-0.055*** (0.017)	0.044 (0.029)	0.096* (0.054)
Comp. Share CA					-0.153** (0.061)	-0.126** (0.061)	-0.051 (0.093)	-0.745*** (0.167)
CA Membership × Comp. Share CA					0.173***	0.281***	-0.052	0.053
<i>Postestimation</i>					(0.062)	(0.063)	(0.091)	(0.163)
Effect of joining if Comp. Share CA = .5					0.088	0.086	0.018	0.122
[p value]					.001	.001	.570	.024
Observations	29,722	22,045	21,610	16,889	29,722	22,045	21,610	16,889
Institutions	1,645	1,645	1,645	1,645	1,645	1,645	1,645	1,645
State-Time Trends	X	X	X	X	X	X		
Year FE	X	X	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X	X	X

Notes: Columns 1–4 report separate regression results using Model (1) including linear state-time trends. Columns 5–8 report separate regression results using Model (2) including linear state-time trends. CA is defined as Common App membership and Comp. Share is defined as the share between 0 and 1 of students attending Common App member schools out of all students attending competitor schools in each college's market. Outcome variables are logged. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/***/ denote significance at the 10/5/1 percent levels.

Table 17. EFFECTS OF THE COMMON APP ON TUITION WITH STATE-TIME TRENDS

	(1) In-State Tuition	(2) Out-of-State Tuition	(3) Tuition Rev. Per FTE	(4) Inst. Aid Per FTE	(5) In-State Tuition	(6) Out-of-State Tuition	(7) Tuition Rev. Per FTE	(8) Inst. Aid Per FTE
CA Membership	-0.008 (0.016)	0.030** (0.013)	0.041*** (0.011)	0.056*** (0.015)	-0.076** (0.031)	0.019 (0.017)	0.012 (0.014)	0.061*** (0.020)
Comp. Share CA					0.379*** (0.089)	0.073 (0.059)	0.050 (0.037)	0.180*** (0.060)
CA Membership × Comp. Share CA					0.222***	0.036	0.097*	-0.019
<i>Postestimation</i>					(0.065)	(0.029)	(0.052)	(0.058)
Effect of joining if Comp. Share CA = .5					0.035	0.037	0.061	0.052
[<i>p value</i>]					.021	.004	.001	.013
Observations	21,424	21,424	30,243	29,374	21,415	21,415	30,230	29,371
Institutions	1,879	1,879	1,879	1,879	1,879	1,879	1,879	1,879
State-Time	X	X	X	X	X	X		
Trends								
Year FE	X	X	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X	X	X

Notes: Columns 1–4 report separate regression results using Model (1) including linear state-time trends. Columns 5–8 report separate regression results using Model (2) including linear state-time trends. CA is defined as Common App membership and Comp. Share is defined as the share between 0 and 1 of students attending Common App member schools out of all students attending competitor schools in each college's market. Outcome variables are logged. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/***/ denote significance at the 10/5/1 percent levels.

Table 18. EFFECTS OF THE COMMON APP ON ADMISSIONS: MARKET DEFINED BY STATE, SECTOR, SELECTIVITY

	(1)	(2)	(3)	(4)	(5)	(6)
	Applications	Acceptances	Yield	Applications	Acceptances	Yield
CA Membership	0.140*** (0.018)	0.136*** (0.018)	-0.012*** (0.004)	0.088*** (0.025)	0.073*** (0.023)	-0.027*** (0.005)
Comp. Share CA				-0.147*** (0.046)	-0.081* (0.046)	-0.021** (0.009)
CA Membership × Comp. Share CA				0.110**	0.123***	0.029***
<i>Postestimation</i>				(0.047)	(0.046)	(0.010)
Effect of joining if Comp. Share CA = .5				0.143	0.135	-0.012
[p value]				.001	.001	.002
Observations	27,425	27,368	27,293	27,406	27,353	27,279
Institutions	1,691	1,691	1,691	1,691	1,691	1,691
Year FE	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X

Notes: Columns 1–3 report separate regression results using Model (1). Columns 4–6 report separate regression results using Model (2). CA is defined as Common App membership and Comp. Share is defined as the share of students between 0 and 1 attending Common App member schools out of all students attending competitor schools in each college's market. Outcome variables are logged. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/***/ denote significance at the 10/5/1 percent levels.

Table 19. EFFECTS OF THE COMMON APP ON ENROLLMENT: MARKET DEFINED BY STATE, SECTOR, SELECTIVITY

	(1) Enroll	(2) In-State Enroll	(3) Out-of-State Enroll	(4) Int'l Enroll	(5) Enroll	(6) In-State Enroll	(7) Out-of-State Enroll	(8) Int'l Enroll
CA Membership	0.033** (0.014)	0.006 (0.013)	0.001 (0.021)	0.106*** (0.037)	0.009 (0.020)	-0.034* (0.018)	0.050 (0.034)	0.002 (0.052)
Comp. Share CA					-0.107*** (0.035)	-0.093*** (0.035)	-0.012 (0.050)	-0.216** (0.085)
CA Membership × Comp. Share CA					0.058 (0.038)	0.093*** (0.035)	-0.091 (0.061)	0.235*** (0.089)
<i>Postestimation</i>								
Effect of joining if Comp. Share CA = .5					0.038	0.013	0.005	0.120
[p value]					.007	.365	.821	.001
Observations	29,722	22,045	21,610	16,889	29,722	22,045	21,610	16,889
Institutions	1,645	1,645	1,645	1,645	1,645	1,645	1,645	1,645
Year FE	X	X	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X	X	X

Notes: Columns 1–4 report separate regression results using Model (1). Columns 5–8 report separate regression results using Model (2). CA is defined as Common App membership and Comp. Share is defined as the share between 0 and 1 of students attending Common App member schools out of all students attending competitor schools in each college's market. Outcome variables are logged. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/***/*** denote significance at the 10/5/1 percent levels.

Table 20. EFFECTS OF THE COMMON APP ON TUITION AND FINANCIAL AID: MARKET
DEFINED BY STATE, SECTOR, SELECTIVITY

	(1) In-State Tuition	(2) Out-of-State Tuition	(3) Tuition Rev. Per FTE	(4) Inst. Aid Per FTE	(5) In-State Tuition	(6) Out-of-State Tuition	(7) Tuition Rev. Per FTE	(8) Inst. Aid Per FTE
CA Membership	-0.033* (0.017)	0.024** (0.012)	0.013 (0.009)	0.061*** (0.015)	-0.045 (0.033) -0.227***	0.004 (0.023) -0.024	0.030*** (0.012) -0.065***	0.006 (0.022) -0.009
Comp. Share CA					(0.051) 0.042	(0.027) 0.040	(0.024) -0.017	(0.033) 0.105***
CA Membership × Comp. Share CA					(0.045)	(0.034)	(0.024)	(0.037)
<i>Postestimation</i> Effect of joining if Comp. Share CA = .5					-0.024	0.024	0.021	0.058
[<i>p value</i>]					.154	.053	.027	.001
Observations	21,424	21,424	30,243	29,374	21,415	21,415	30,230	29,371
Institutions	1,879	1,879	1,879	1,879	1,879	1,879	1,879	1,879
Year FE	X	X	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X	X	X

Notes: Columns 1–4 report separate regression results using Model (1). Columns 5–8 report separate regression results using Model (2). CA is defined as Common App membership and Comp. Share is defined as the share of students between 0 and 1 attending Common App member schools out of all students attending competitor schools in each college's market. Outcome variables are logged. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/***/*** denote significance at the 10/5/1 percent levels.

Table 21. EFFECTS OF THE COMMON APP ON ADMISSIONS: ONLY FUTURE JOINERS

	(1)	(2)	(3)	(4)	(5)	(6)
	Applications	Acceptances	Yield	Applications	Acceptances	Yield
CA Membership	0.078*** (0.018)	0.069*** (0.018)	-0.017*** (0.004)	0.093*** (0.025)	0.066*** (0.024)	-0.024*** (0.006)
Comp. Share CA				-0.353*** (0.090)	-0.306*** (0.090)	0.024 (0.022)
CA Membership × Comp. Share CA				-0.023 (0.069)	0.034 (0.069)	0.020 (0.016)
<i>Postestimation</i>						
Effect of joining if Comp. Share CA = .5				0.081	0.083	-0.014
[p value]				.001	.001	.008
Observations	16,027	16,027	16,021	16,027	16,027	16,021
Institutions	851	851	851	851	851	851
Year FE	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X

Notes: Columns 1–3 report separate regression results using Model (1). Columns 4–6 report separate regression results using Model (2). CA is defined as Common App membership and Comp. Share is defined as the share of students attending Common App member schools out of all students attending competitor schools in each college's market. Acceptances and admissions variables are logged. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/***/ denote significance at the 10/5/1 percent levels.

Table 22. EFFECTS ON THE COMMON APP ON ENROLLMENT: ONLY FUTURE JOINERS

	(1) Enroll	(2) In-State Enroll	(3) Out-of-State Enroll	(4) Int'l Enroll	(5) Enroll	(6) In-State Enroll	(7) Out-of-State Enroll	(8) Int'l Enroll
CA Membership	-0.012 (0.014)	-0.028** (0.014)	-0.032 (0.021)	0.067* (0.038)	-0.002 (0.019)	-0.049*** (0.018)	0.034 (0.030)	0.049 (0.054)
Comp. Share CA					-0.287*** (0.069)	-0.266*** (0.069)	-0.132 (0.123)	-0.610*** (0.209)
CA Membership × Comp. Share CA					-0.014 (0.059)	0.096* (0.054)	-0.219** (0.087)	0.117 (0.171)
<i>Postestimation</i>								
Effect of joining if Comp. Share CA = .5					-0.008	-0.001	-0.075	0.107
[p value]					.685	.954	.014	.077
Observations	16,565	12,758	12,692	10,429	16,565	12,758	12,692	10,429
Institutions	847	847	847	847	847	847	847	847
Year FE	X	X	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X	X	X

Notes: Columns 1–4 report separate regression results using Model (1). Columns 5–8 report separate regression results using Model (2). CA is defined as Common App membership and Comp. Share is defined as the share of students between 0 and 1 attending Common App member schools out of all students attending competitor schools in each college's market. Outcome variables are logged. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/***/*** denote significance at the 10/5/1 percent levels.

Table 23. EFFECTS OF THE COMMON APP ON TUITION AND FINANCIAL AID: ONLY
FUTURE JOINERS

	(1) In-State Tuition	(2) Out-of-State Tuition	(3) Tuition Rev. Per FTE	(4) Inst. Aid Per FTE	(5) In-State Tuition	(6) Out-of-State Tuition	(7) Tuition Rev. Per FTE	(8) Inst. Aid Per FTE
CA Membership	0.010 (0.012)	0.015 (0.012)	0.007 (0.008)	0.067*** (0.014)	0.016 (0.024) -0.035 (0.092) -0.017	0.003 (0.020) -0.050 (0.079) 0.042	0.026** (0.012) -0.163*** (0.048) -0.051	0.053*** (0.019) 0.194** (0.084) 0.033
Comp. Share CA								
CA Membership × Comp. Share CA								
<i>Postestimation</i>								
Effect of joining if Comp. Share CA = .5								
<i>[p value]</i>					.683	.096	.981	.001
Observations	10,817	10,817	15,597	15,627	10,817	10,817	15,597	15,627
Institutions	846	846	846	846	846	846	846	846
Year FE	X	X	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X	X	X

Notes: Columns 1–4 report separate regression results using Model (1). Columns 5–8 report separate regression results using Model (2). CA is defined as Common App membership and Comp. Share is defined as the share of students between 0 and 1 attending Common App member schools out of all students attending competitor schools in each college's market. Outcome variables are logged. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/***/*** denote significance at the 10/5/1 percent levels.

Table 24. EFFECTS OF THE COMMON APP ON ADMISSIONS: INCLUDING PRE-2004 CA MEMBERS

	(1)	(2)	(3)	(4)	(5)	(6)
	Applications	Acceptances	Yield	Applications	Acceptances	Yield
CA Membership	0.126*** (0.017)	0.144*** (0.017)	-0.024*** (0.004)	0.086*** (0.021)	0.132*** (0.021)	-0.053*** (0.005)
Comp. Share CA				-0.422*** (0.080)	-0.300*** (0.080)	-0.034** (0.017)
CA Membership × Comp. Share CA				0.170***	0.068	0.100***
<i>Postestimation</i>				(0.063)	(0.062)	(0.014)
Effect of joining if Comp. Share CA = .5				0.171	0.166	-0.003
<i>[p value]</i>				.001	.001	.542
Observations	31,891	31,834	31,759	31,891	31,834	31,759
Institutions	1,915	1,915	1,915	1,915	1,915	1,915
Year FE	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X

Notes: Columns 1–3 report separate regression results using Model (1). Columns 4–6 report separate regression results using Model (2). CA is defined as Common App membership and Comp. Share is defined as the share of students between 0 and 1 attending Common App member schools out of all students attending competitor schools in each college's market. Applications and admissions variables are logged. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/***/ denote significance at the 10/5/1 percent levels.

Table 25. EFFECTS OF THE COMMON APP ON ENROLLMENT: INCLUDING PRE-2004
CA MEMBERS

	(1) Enroll	(2) In-State Enroll	(3) Out-of-State Enroll	(4) Int'l Enroll	(5) Enroll	(6) In-State Enroll	(7) Out-of-State Enroll	(8) Int'l Enroll
CA Membership	0.028** (0.013)	0.008 (0.013)	0.025 (0.020)	0.069* (0.036)	0.003 (0.015)	-0.022 (0.015)	0.112*** (0.025)	-0.027 (0.049)
Comp. Share CA					-0.327*** (0.062)	-0.309*** (0.062)	-0.078 (0.090)	-0.517*** (0.151)
CA Membership × Comp. Share CA					0.110** (0.048)	0.140*** (0.048)	-0.299*** (0.072)	0.432*** (0.135)
<i>Postestimation</i>								
Effect of joining if Comp. Share CA = .5					0.058	0.049	-0.038	0.189
[p value]					.002	.011	.182; .001	
Observations	34,195	25,327	24,895	19,891	34,195	25,327	24,895	19,891
Institutions	1,869	1,869	1,869	1,869	1,869	1,869	1,869	1,869
Year FE	X	X	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X	X	X

Notes: Columns 1–4 report separate regression results using Model (1). Columns 5–8 report separate regression results using Model (2). CA is defined as Common App membership and Comp. Share is defined as the share of students between 0 and 1 attending Common App member schools out of all students attending competitor schools in each college's market. Outcome variables are logged. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/***/*** denote significance at the 10/5/1 percent levels.

Table 26. EFFECTS OF THE COMMON APP ON TUITION AND FINANCIAL AID:
INCLUDING PRE-2004 CA MEMBERS

	(1) In-State Tuition	(2) Out-of-State Tuition	(3) Tuition Rev. Per FTE	(4) Inst. Aid Per FTE	(5) In-State Tuition	(6) Out-of-State Tuition	(7) Tuition Rev. Per FTE	(8) Inst. Aid Per FTE
CA Membership	-0.025 (0.016)	0.020* (0.012)	0.017* (0.009)	0.045*** (0.014)	-0.025 (0.021) -0.431***	0.000 (0.015) -0.030	0.025** (0.011) -0.207***	0.010 (0.017) 0.169***
Comp. Share CA					(0.093) 0.022	(0.043) 0.063*	(0.042) -0.009	(0.059) 0.101**
CA Membership × Comp. Share CA					(0.046)	(0.034)	(0.033)	(0.048)
<i>Postestimation</i> Effect of joining if Comp. Share CA = .5					-0.014	0.032	0.021	.061
[<i>p value</i>]					.437	.027	.113	.002
Observations	24,327	24,327	34,465	33,624	24,327	24,327	34,465	33,624
Institutions	2,103	2,103	2,103	2,103	2,103	2,103	2,103	2,103
Year FE	X	X	X	X	X	X	X	X
Institution FE	X	X	X	X	X	X	X	X

Notes: Columns 1–4 report separate regression results using Model (1). Columns 5–8 report separate regression results using Model (2). CA is defined as Common App membership and Comp. Share is defined as the share of students between 0 and 1 attending Common App member schools out of all students attending competitor schools in each college's market. Outcome variables are logged. The sample includes four-year US colleges with data from IPEDS and the Common App. Standard errors clustered at the institution level are in parentheses. */**/***/*** denote significance at the 10/5/1 percent levels.