"Prior-prior year" FAFSA increased aid submissions but likely not enrollment

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Abstract: The Free Application for Federal Student Aid (FAFSA) is the primary gatekeeper to secure financial aid for college. The federal government instituted two changes to the process in 2017, commonly known as "prior-prior year" FAFSA: (1) an earlier start date that lengthens the filing period and (2) the ability to use completed taxes from the prior calendar year. This paper uses descriptive statistics to examine resulting changes in application filing behavior in California. Students submitted their FAFSA substantially earlier and refiling rates increased among independent students in the policy year. Although these changes may have reduced the burden of applying, the earlier submissions did not appear to substantially alter state aid receipt or postsecondary attendance.

Keywords: Financial aid; federal policy; FAFSA; California

Introduction

The Free Application for Federal Student Aid (FAFSA) is the primary gatekeeper for financial aid for college. The complexity of the FAFSA can create barriers for students desiring to receive Pell Grants, state specific need-based aid, or student loans, and many students leave "money on the table" (Bettinger, Long, Oreopoulos, & Sanbonmatsu, 2012; Martorell & Friedmann, 2018). High transactional costs and a lack of information can result in missed deadlines and foregone opportunities (Currie, 2006; Duflo & Saez, 2003; Finkelstein & Notowidigdo, 2019). Empirical evidence suggests that the FAFSA deters students from pursuing postsecondary education altogether (Bettinger et al., 2012; Dynarski, Scott-Clayton, & Wiederspan, 2013), and experiments leveraging reminders for FAFSA completion significantly increase student persistence (Bird & Castleman, 2016; Castleman & Page, 2016).

Beginning in the FAFSA application cycle for 2017-18 enrollment (henceforth 2017), the Department of Education instituted a new policy called "prior-prior year" (PPY) FAFSA. This policy opened the application process three months earlier (i.e., October instead of January) and allowed students to submit their prior year's taxes. The policy presumed that lengthening the application period and allowing students to use already completed tax forms would relieve key constraints. Relying on prior year tax forms could also improve the accuracy of submitted information, reducing the incidence of costly verification processes that decrease enrollment (Lee, Dell, González Canché, Monday, & Klafehn, forthcoming). However, if individuals procrastinate submission until close to the required deadline, or if those who fail to meet FAFSA deadlines are those with lower interest in college, then PPY may have little effect on aid receipt or enrollment.

Submission patterns may also differentially impact dependent and independent students. Dependent students tend to have more resources available, including scholarships, family

contributions, and counselors or other advisers trained to help them access college. Independent students are older, more likely to have dependents, and more financially independent from their parents. The FAFSA calculates the expected family contribution with different formulas for independent and dependent students, and independent students tend to have greater financial need (Long & Riley, 2007). As independent students are solely responsible for completing and submitting required tax information, they may benefit more from the longer timeline and simplification.

We investigate whether FAFSA filing behaviors in California changed after the implementation of PPY. We find that students took advantage of these new policies, with substantial numbers of students using the new early filing period before January 1, and a large spike in the number of students whose income was exactly the same across years, which is evidence of students using their prior tax forms. Nonetheless, we observe only small increases in total FAFSA submissions after PPY, mostly concentrated among independent students.

To better understand the potential for increased submissions, we switch our focus away from aggregate counts of FAFSA submissions to examine FAFSA refiling behaviors among those who have submitted at least once. Although examining changes in refiling that are concurrent with PPY is still fundamentally a descriptive analysis, we think this approach provides additional insight over aggregate year-to-year changes in total submissions. Under the reasonable assumption that each student's decisions to initially file the FAFSA prior to the policy year is independent of the subsequent policy change, this approach creates observational similar cohorts than span PPY and pre-PPY years.[1] Thus variation in refiling is more likely to be related to the policy change itself rather than compositional changes of students induced to file the FAFSA for the first-time.

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[1] We find no meaningful changes in student characteristics between the 2016 cohort that was first impacted by PPY, relative to the two prior cohorts, though omit these descriptive statistics for brevity.

Using this approach additionally allows us to examine refiling while statistically controlling for student's background characteristics from their initial FAFSA submission. Using this subsample we again find increases in FAFSA re-filing submission rates concentrated among independent students. Even though we find higher refiling rates, and these submissions occur substantially earlier and are more likely to be submitted by the California's state aid deadline, we find little to no change in state aid receipt or college attendance rates.

Background, Data & Sample

Students in California use the FAFSA to obtain both federal and state aid. State aid comes through the Cal Grant program which requires both FAFSA submission and GPA verification by March 2. Most Cal Grants go to recent high school graduates, though some older students are eligible.[2]

The Obama administration announced PPY in September 2015. Starting in the 2017-2018 academic year, the FAFSA opened on October 1, 2016, rather than January 1, 2017. FAFSA applicants could also submit "prior-prior year" tax information; applicants in the 2017-18 academic year could use their 2015 taxes filed by April 2016, rather than their 2016 taxes to be filed by April 2017. In California (as in many other states), the March 2 deadline required families to complete their taxes in February, much earlier than the official April 15 tax deadline. Students could import completed tax return data from the IRS; however, on March 4, 2017, the first year of PPY, the Department of Education abruptly suspended IRS data retrieval, which may have hampered applicants' ability to fill out the FAFSA after March 4.

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[2] In 2017-18, 75% of Cal Grants went to high school graduates who are "low-income" and have a 2.0 GPA, or "middle-income" and have a 3.0 GPA. Income status varies by year and family size, but in 2017-18 a dependent in a family of four was middle- or low-income if their family earned below $95,400 and $40,100, respectively. The remaining awards went to older students via a more selective process. The Cal Grant offers annual support of: full tuition and fees for four-year public colleges; a $9,000 subsidy for private colleges, or; approximately $1,500 cash to support community college enrollment.

Our primary data source is a one-third random sample of all FAFSA submissions from 2014 through 2019, provided by the California Student Aid Commission (CSAC).[3] FAFSA data contain background information including gender, age, zip code, education level, family income, and the date that students completed their FAFSA. We observe postsecondary enrollment at all of California's public two- and four-year colleges.[4] We also matched a subsample (approximately 11% but oversampling independent students) to postsecondary enrollment records from the National Student Clearinghouse (NSC), which draws from a larger pool of colleges. Although NSC data improves our analysis by allowing us to observe enrollment most in-state, private colleges and out of state colleges, in practice most California students enroll in the expansive in-state, public college system (Kurlaender et al., 2018). Full details appear in Appendix 1.

For the purposes of this study, we restrict our panel data to students who submitted a FAFSA application for the upcoming academic year from the first day of FAFSA application availability (i.e., January 1 in pre-policy years, and October 1 starting from the year of the PPY policy change) up to June 1. We further restrict to those whom we assume are attending or intend to enroll as undergraduates, omitting applicants who self-report on the FAFSA that they are attending graduate/professional school or that they have already earned a bachelor's degree. Thus our analysis includes both new students who are submitting the FAFSA for the first-time as well as continuing students.

We examine three outcomes of interest surrounding postsecondary access and enrollment. Our first outcome of interest is an indicator variable for whether the applicant has refiled a FAFSA for the upcoming school year. This variable equals one if the applicant has filed a FAFSA

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[3] We relied on a one-third random sample in order to deidentify the data and facilitate researcher use. Randomization was done at the student level to accurately track applicants across years. Given the full dataset had over 10 million student-by-year observations, this randomization has no impact on our analysis.
[4] CSAC receives files on public college enrollment that are linked by student SSN. These files only contain a snapshot of student enrollment in the Fall term.

application in the current school year *and* is observed doing so again in the school year that immediately follows. We examine likelihood of FAFSA refiling by June 1, as well as by March 2, which covers the focal California state aid deadline mentioned previously. For analyses concerning enrollment, we rely on three primary set of outcomes. The first set of examines whether a student enrolled in an in-state public college, which we disaggregate into either two-year and four-year colleges; we combine California State University (CSU) and University of California (UC) enrollment as, in the aggregate, relatively few students enroll in a UC). Second, we observe whether the applicant received a Cal Grant payment in the subsequent academic year, which covers in-state public as well as private colleges. In addition to being interested in state aid receipt, Cal Grant payments also proxy for enrollment but include a wider set of in-state, private colleges. Finally, we observe postsecondary enrollment via National Student Clearinghouse (NSC), but only for a subset of students as described in Appendix 1.

Table 1 provides summary statistics for the full sample, dependent and independent students, and the NSC subsample. Females make up 59% of the full sample, and 94% are U.S. citizens. The remaining 6% are either legal permanent residents or non-citizens who can submit the FAFSA. Relative to dependent students, independents are older, have significantly lower family income ($26,000 versus $67,000), have parents with lower levels of education, and are in smaller families (2.2 versus 4.1 individuals). Independents and dependents report being freshmen at similar rates, though independents are more likely to have some prior postsecondary experience.

Method and results

Trends in Total FAFSA Submissions

Students used PPY to file the FAFSA significantly earlier than in prior years, and PPY increased total FAFSA submissions for independent students. Figure 1 shows overall trends in FAFSA submissions up until June 1, disaggregated by year, dependency status, and the FAFSA submission date. (Including applications after June does not change results and is omitted for ease of exposition). Of all the applications submitted by June 1, 2017, almost 42% were completed before January 1, the starting date in prior years. PPY does not change the fact that many applicants wait until just before the March 2 deadline to complete their FAFSA. We see almost no change in total FAFSA submissions for dependent students; however, independent students are much more likely to complete a FAFSA. This is a one-time effect, and after the first year of PPY the filing rates return to typical levels.

We also find that students used the PPY policy by increasing their reliance on prior tax returns. Specifically, we examine whether students who file the FAFSA with positive income report having the same exact income the prior year.[5] Prior the policy change, we find that roughly 2% of all FAFSA submissions report the same exact income the prior year, which makes sense as individual income will likely exhibit year-to-year fluctuations. Yet in the first year of PPY, this value spikes to almost 27%, as students simplify their application by using the previous year's tax returns. This value then drops dramatically back to its prior levels over the next two years of submissions. This drop follows logically as any student who relied on prior tax returns must necessarily use new returns the following year. Nonetheless, it does suggest that students are likely to use their prior year's tax returns, which reduces some of the burden associated with getting taxes

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[5] We focus on students with positive income as many students who fall into specific categories, such as automatic zero EFC, are likely to have a reported income of $0, and we want to examine students relative to their reported income on their tax returns.

done substantially before the official April 15 deadline to submit the FAFSA early enough to meet college or state aid deadlines.

Trends in Total FAFSA Renewals

To better investigate any relationship between PPY and college outcomes, we focus on the subsample of students who submitted the FAFSA and then examine their refiling behaviors. Our primary group of interest are students who filed the FAFSA in 2016 and whether they refiled in 2017, the first PPY year, compared to typical refiling rates in the two prior years (i.e., students who filed in 2014 and 2015 and whether they refiled in 2015 and 2016, respectively). This provides a complementary and stronger approach toward investigating any relationship between PPY and FAFSA submission behaviors, under the assumption that the student's decision to file the FAFSA in 2016 was independent of the introduction of PPY in 2017. If PPY induced new FAFSA applicants, then cross-year comparisons could be misleading because policy-induced applicants would not have a counterfactual in the pre-policy cohorts. In contrast, this approach explicitly compares similar students – both due to no large changes in who filed the FAFSA in pre-policy years and via statistical controls for any slight cross-cohort differences – though with a slightly different focus on refiling outcomes rather than initial filing.

For this analysis we simply run OLS models on a set of outcome variables – did a student refile the FAFSA, receive state aid, enroll or persist for two years in college – after controlling for observable characteristics across years, using the following equation:

$$Y_{it} = \beta_0 + \beta_{1t} application\_year_t + X_{it} + \varepsilon_{it} \quad (1)$$

This equation includes application year dummies (t) to measure changes across cohorts, and background characteristics (X_{it}) that include dependency status, gender, deciles of age, citizen status, family size dummies, deciles of income, father, mother, and student education level, and indicators for listing colleges from each sector on the FAFSA (i.e., community college; CSU; UC; private non-profit; private for-profit).[6] Standard errors are clustered by zip code of residence.[7]

Figure 2 shows estimates from just the year dummies from equation (1), using 2015 as the reference category. [8] The introduction of PPY is associated with an approximately six percentage point (pp) increase in refiling the FAFSA for independent students. This jump in refiling is a one-time increase, and we find little evidence of any sustained relationship between PPY and likelihood of FAFSA refiling. We find no evidence of a one-time or sustained relationship between the two among dependent students. An upper bound estimate, that compares the policy year to the year just prior and attributes any difference purely to the impacts of PPY, would suggest a roughly 2pp increase in refiling for dependent students.

Table 2 presents regressions results from equation (1), though only for the cohort of students in 2016 who were first impacted by the PPY policy.[9] The policy is linked to a 2.1pp increase in likelihood of refiling by June 1, or a 5.6pp increase for independents (column 2) and 0.1pp change for dependents (column 3). Dependent students experienced a small increase (0.6pp) in the likelihood of refiling by the March 2 state deadline. Nonetheless, changes to Cal Grant disbursements are small, with essentially no change for independent students and a 1.9pp increase

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[6] We allow all covariates to vary by year t, to account for the fact that age, dependency status, student education level, and the like are all likely to change between years.

[7] This helps us account for any potential unobservable shocks that may lead to intra-cluster correlations in outcomes. Models using standard errors clustered at the student level or along alternate dimensions yield similar results.

[8] Using 2014 as the reference category produces similar results, but CSAC's postsecondary enrollment records only begin in 2015, so we shorten the timeframe for simplicity. Although we include point estimates for the two subsequent application years, these include students who filed in a post-policy year, who could theoretically be different in unobserved ways due to potential compositional changes in the post-policy cohorts. Nonetheless, adding more years of pre-period data or removing the post periods used in our analysis does not change any of the results.

[9] Table 2 presents linear probability results but we show marginal effects from logistic regression results in Appendix Table 2.

in the likelihood of receiving state aid for dependents. The average annual state aid for dependent students increased by just $103.

Point estimates on postsecondary enrollment are negative though small, highlighting very little change in college-going in the PPY year. (Appendix Figure 1 shows point estimates for all the year dummies). The fact that enrollment does not increase for independent students, even though they had large changes in refiling, especially when compared to dependents, suggests that year-to-year enrollment changes are not strongly related to changes in refiling. Enrollment effects after two years are typically even smaller and negligible, at one percentage point or less.

NSC subsample results are presented in Appendix Table 1, with all year dummy estimates for refiling and enrollment in Appendix Figures 2 and 3. Results are broadly similar to Table 2, with positive changes to refiling rates for independents in the policy year and essentially null or even negative changes for dependents. Enrollment rates look slightly more positive than in Table 2; however, we caution against optimism as there is no change in enrollment after two years. The increased enrollment in the first year is likely part of simple trend in overall enrollment across years. For example, annual enrollment patterns for both dependents and independents increase slightly between years; however, all the refiling increases were in the independent sample. This constitutes further evidence that there is little connection between changes in refiling rates and enrollment rates.

A natural extension of our main results is to examine whether there are heterogenous impacts for different groups of students. Given the large number of student characteristics, we construct an omnibus measure of a student's underlying propensity to refile, and examine changes in refiling and enrollment behaviors by this metric. We calculate a student's likelihood to refile with a logistic regression based on the covariates described in equation (1) using just the 2014

sample, classify students into quintiles based on this distribution, and then apply these quintile cutoffs to classify students in all other years (See Appendix Table 3). We find no meaningful differences in likelihood of refiling or changes in enrollment across these quintile groups. Independent students with both low and high propensity to refile the FAFSA saw increases in refile rates in the PPY year (Appendix Figure 4, top panel), but point estimates for changes in enrollment rates (bottom panel) did not change much between 2016 and the 2017 policy year. Thus, our finding that there are no changes in enrollment appear quite uniform across both students who are very likely and very unlikely to persist in the pre-policy years.

Conclusion

Students took advantage of PPY to complete the FAFSA earlier than in prior years. For independent students this resulted in an increase in total submissions in the PPY policy year, but these changes did not persist over time and did not translate into substantial changes in postsecondary enrollment. Dependent students show essentially no changes in their FAFSA filing and enrollment behaviors during this period. Point estimates on enrollment are small at always less than two percentage points, vary between positive and negative depending on model or subsample, and always smaller (i.e., less than one percentage point) when examining persistence into the second year. This is true even though we observe consistently large increases in FAFSA resubmission rates for independent students, regardless of the regression model used, suggesting no real link between refiling and enrollment. Enrollment estimates are smaller than prior work on FAFSA advising (e.g., Bettinger et al. (2012)) or other interventions to support students such as counseling or financial aid (e.g., Bettinger and Baker (2014); Bettinger, Gurantz, Kawano, Sacerdote, and Stevens (2019)), though these studies primarily focus on younger, dependent

students. Prior work examining interventions for older, independent students often produce little changes in enrollment (e.g., Gurantz (2022), and our study is no different.

We believe results on FAFSA submissions in the second year return to the pre-period trend for two main reasons. One is that the composition of the pool of FAFSA submitters has endogenously changed, given the observed increase in FAFSA renewals. This implies that students induced by the policy to resubmit the FAFSA are now in the new cohort, and their outcomes are combined with those of the existing group of students who would have been unaffected by the policy shift. The second possible reason is that students impacted by the first year of PPY did not have to submit new tax information, as they could now rely on their 2016 tax submission to minimize this portion of the FAFSA submission process. Yet in the following year, the students who took this approach would have had to submit new tax data, as their submission the prior year was now updated. This is exactly what we see in the data, with a large spike in identical reported income in the first year of the policy (i.e., students gave the same exact income in the first PPY year as they had last year, which is not common), which drops back to normal rates in year two. Thus the increase in FAFSA submissions seems driven by a relatively small group of independent students who used the simplified process to resubmit their FAFSA form, but whose commitment to re-enrolling was likely very low.

We note two limitations of the present study and how they might influence the interpretation of the results. The first is that we rely on FAFSA submission data, and are unable to observe the full population of California state residents and their FAFSA submission rates. We do know there was no large year-to-year change in the general California population, and an analysis of Common Core of Data shows no substantive changes in high school enrollment, free and reduced price lunch participation, and other characteristics (Appendix Table 4). However, without

a full sense of the counterfactual, it is still possible that the policy change induced more students to file the FAFSA, above and beyond the small increases in FAFSA submission we observe for independent students. The second limitation is the descriptive nature of the analysis which precludes making strong causal claims that attribute all observed changes in filing rates to PPY. Nonetheless, there are a few reasons we believe that a meaningful portion of these shifts in filing are related to PPY. First, our analysis of refiling behaviors is only among those who would have already chosen to enroll in college prior to PPY, so avoids endogenous changes to the population noted above. Second, the FAFSA re-filing increase is also among older, independent students who would not likely have been affected by any unobserved state policies that typically target high schools and their students.[10] Future research with alternate data could explore whether PPY induced students who had never submitted the FAFSA before to do so, and whether this increased postsecondary attainment.

There is a long literature that focuses on the role of administrative burdens, and how these policy choices shape both access to services and individual's perceptions of government (Herd & Moynihan, 2019). Together, the changes enacted by PPY adhere to some proposed best practices that reduce the complexity of application processes, and increasing the time available for individuals to complete forms has been shown to improve participation rates among eligible individuals (Homonoff & Somerville, 2021). We can see that many students initially took advantage of the opportunity to use their prior year's tax returns, and this policy change is likely what helped them consistently use the earlier submission date even in subsequent years, suggesting

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[10] Although we cannot observe any and all policy changes, we are highly familiar with the California policy context and do not believe there are any changes – particularly those targeting older, "non-traditional" students – that could have led to such a large shift that occurs dramatically from 2015 to 2016. Reviewers noted AB 2160, which helped automate the process of GPA submissions from high school students to receive state aid, as one possible example, but most high schools had already adopted this policy prior to PPY, and this would have had no impact on independent students.

that the policy may have lowered the burden of completing the FAFSA. Ultimately we observe gains in submissions are short lived, likely as students are still required to collect new tax data for the FAFSA each year. Automated systems that link tax data to students are much more likely to be effective in the long run (e.g., Foote, Grosz, and Rennane (2019)). Future actions to continue lowering application burdens, such as improving access to the Data Retrieval Tool, enacting elements of the FAFSA Simplification Act, and reducing FAFSA verification rates, can all help improve student's experience with the administrative aspect of college enrollment. These may be especially relevant for independents students who have fewer external supports, such as parental or university help to navigate both enrollment issues and their tax returns. Continued changes in these policy areas can increase students' ability to focus on their schooling and outside responsibilities, and the accumulation of these individual changes may lead to more comprehensive improvements in enrollment over time.

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Figure 1. Cumulative FAFSA submissions by year and dependency status

All Dependent Students

Days from California priority deadline (Mar 2)

	2014		2015		2016
	2017 (policy year)		2018		2019

All Independent Students

Days from California priority deadline (Mar 2)

	2014		2015		2016
	2017 (policy year)		2018		2019
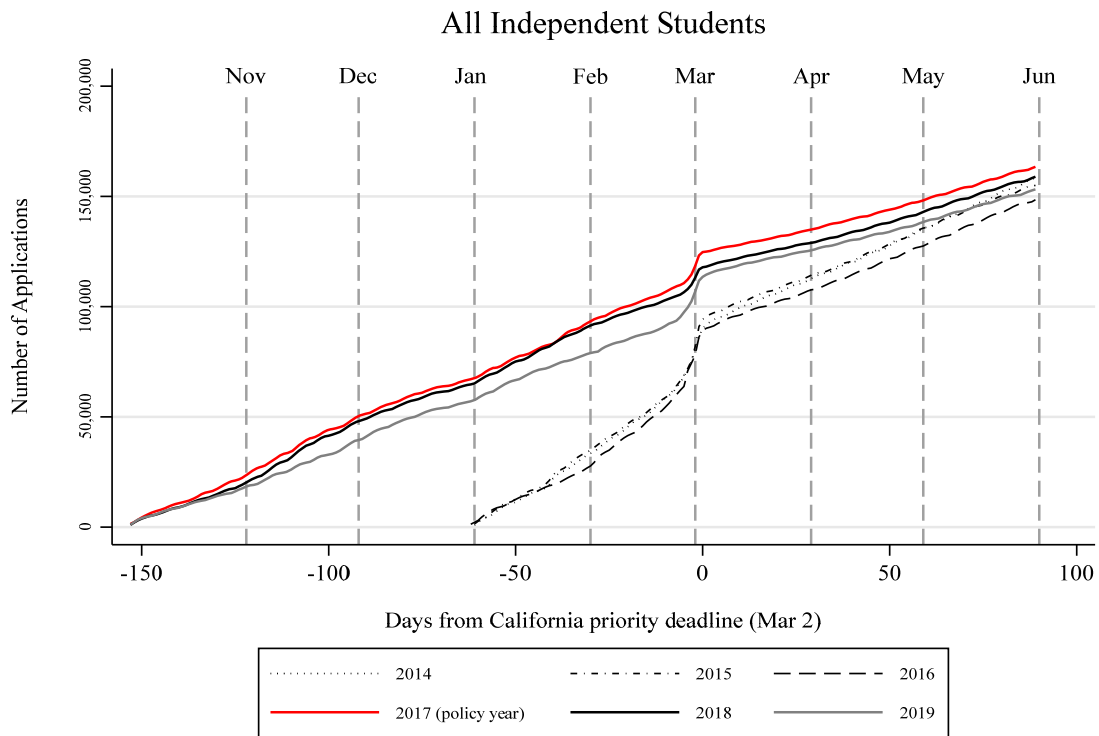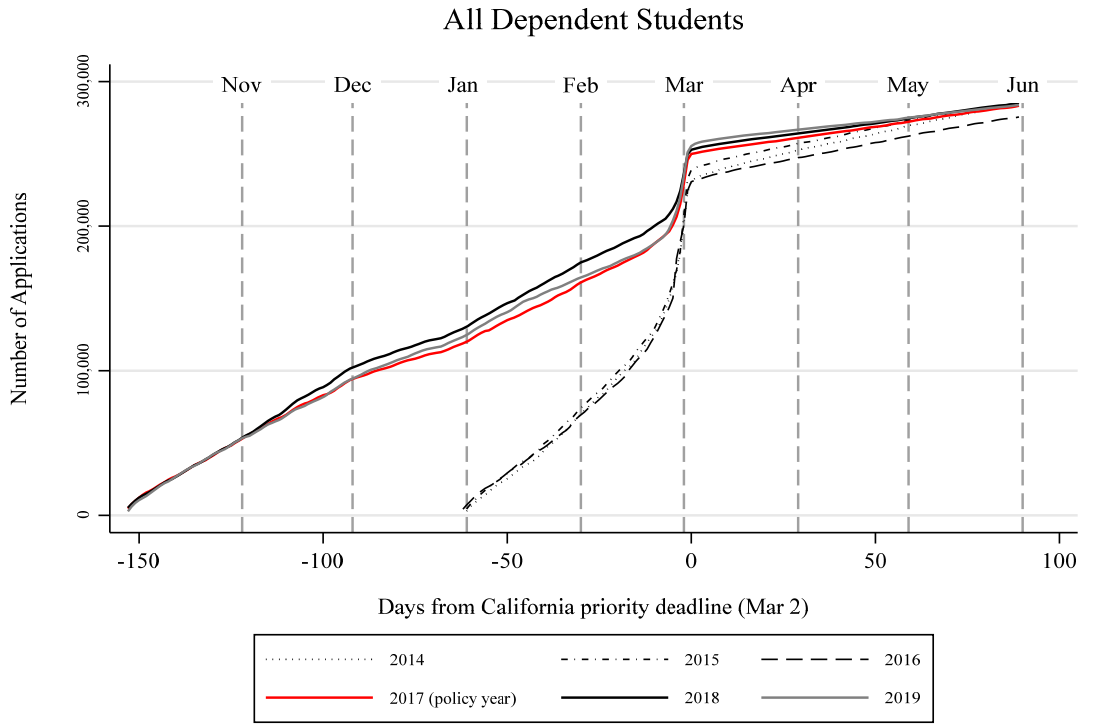
Figure 2. Full sample, changes in refiling rates across years
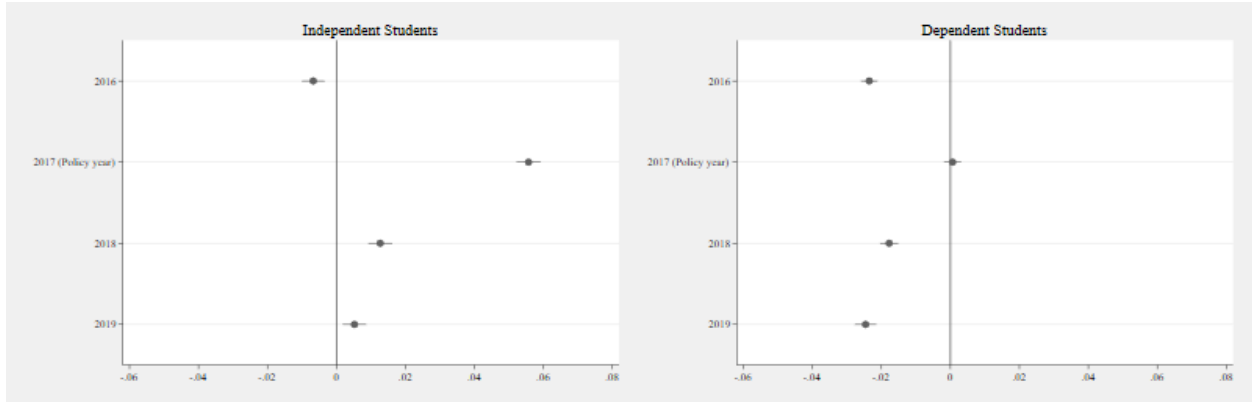
Markers and bars represent coefficients and 95% confidence intervals from a regression predicting refile rates separately for independent and dependent students. Other coefficients not displayed. Sample consists of a one-third random sample of California FAFSA applications filed between 2014 and 2019 (n=2,174,529 observations). Covariates include dependency status, gender, deciles of age, citizen status, family size dummies, deciles of income, father, mother, and student education level, and indicators for listing colleges on the FAFSA from each sector (i.e., community college; CSU; UC; private non-profit; private for-profit). Standard errors are clustered by students' zip code of residence.

Table 1. Summary Statistics by Sample

	All Students		Independent Students		Dependent Students		NSC Sample	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
% Refilers	0.46	(0.50)	0.40	(0.49)	0.50	(0.50)	0.53	(0.50)
Independent	0.36	(0.48)	1.00	(0.00)	0.00	(0.00)	0.53	(0.50)
Female	0.59	(0.49)	0.63	(0.48)	0.57	(0.50)	0.59	(0.49)
US Citizen	0.94	(0.23)	0.92	(0.27)	0.95	(0.21)	0.93	(0.26)
Age at Application								
19 and Below	0.29	(0.45)	0.02	(0.15)	0.44	(0.50)	0.25	(0.43)
20-24	0.43	(0.50)	0.21	(0.40)	0.56	(0.50)	0.36	(0.48)
25+	0.28	(0.45)	0.77	(0.42)	0.00	(0.00)	0.39	(0.49)
Income ($)	51958.70	(53275.24)	25685.46	(26601.19)	66609.18	(58538.70)	41657.94	(41819.50)
Family Size	3.41	(1.58)	2.19	(1.43)	4.10	(1.20)	3.07	(1.65)
Year in College								
No Prior College/Freshman	0.25	(0.43)	0.12	(0.32)	0.32	(0.47)	0.23	(0.42)
Some Prior College/Freshman	0.15	(0.36)	0.24	(0.43)	0.10	(0.30)	0.18	(0.38)
Second Year/Sophomore	0.22	(0.41)	0.22	(0.41)	0.22	(0.42)	0.24	(0.43)
Third Year/Junior	0.21	(0.41)	0.22	(0.41)	0.20	(0.40)	0.21	(0.41)
Fourth Year/Senior	0.12	(0.33)	0.13	(0.33)	0.12	(0.32)	0.11	(0.31)
Fifth Year +	0.05	(0.22)	0.07	(0.26)	0.04	(0.19)	0.04	(0.19)
Parent Education Level								
Less than High School	0.11	(0.31)	0.11	(0.32)	0.11	(0.31)	0.11	(0.32)
High School	0.35	(0.48)	0.39	(0.49)	0.34	(0.47)	0.37	(0.48)
College or Beyond	0.44	(0.50)	0.37	(0.48)	0.47	(0.50)	0.42	(0.49)
Unknown	0.10	(0.30)	0.13	(0.34)	0.08	(0.27)	0.10	(0.31)
Number of Schools Listed	1.97	(2.20)	1.36	(1.28)	2.32	(2.51)	1.86	(2.05)
Listed CC	0.47	(0.50)	0.56	(0.50)	0.42	(0.49)	0.50	(0.50)
Listed CSU	0.32	(0.47)	0.22	(0.41)	0.38	(0.49)	0.30	(0.46)
Listed UC	0.16	(0.37)	0.04	(0.20)	0.22	(0.42)	0.14	(0.34)
Student-Year Observations	3075308		1100944		1974364		320053	

Notes: Observations in the pre-policy years consist of applications filed for school years 2013-2014 through 2015-2016 while obsevations in the post-policy years consist of applications filed for school years 2017 through 2019. % Refilers indicates the share of applicants in a given year who are also observed filing an application in the year prior, averaged across all years in the sample. Certain student characteristics (i.e., dependency, gender, citizenship, age, income, family size, year in college, parent education level) are self-reported in the FAFSA application. Parent education level reflects the maximum education level of the father and mother of the student as reported on the application.

Table 2: Changes in student outcomes in 2017 year of "prior prior year" implementation

	All Students	Independent Students	Dependent Students
	(1)	(2)	(3)
Refiling outcomes			
Refiled in Following Year by June 1	0.021**	0.056**	0.001
	(0.001)	(0.002)	(0.001)
Refiled in Following Year by March 3 (state aid deadline)	0.019**	0.040**	0.006**
	(0.001)	(0.002)	(0.001)
Cal Grant outcomes			
Received Cal Grant Disbursement	0.012**	0.003**	0.019**
	(0.001)	(0.001)	(0.001)
Total Amount Received	68.585**	17.837**	103.320**
	(4.807)	(4.566)	(6.860)
Enrollment outcomes			
Enrolled in Following Year	-0.008**	-0.012**	-0.008**
	(0.001)	(0.002)	(0.001)
Enrolled in Following Year, Two-Year Institutions	-0.009**	-0.015**	-0.008**
	(0.001)	(0.002)	(0.001)
Enrolled in Following Year, Four-Year Institutions	0.000	0.003**	0.001
	(0.001)	(0.001)	(0.001)
Enrolled After Two Years	-0.006**	-0.001	-0.010**
	(0.001)	(0.002)	(0.001)
Baseline Mean Refile Rate (by Mar 3)	0.431	0.262	0.524
Baseline Mean Refile Rate (by Jun 1)	0.532	0.405	0.601
Baseline Mean Enrollment Rate	0.504	0.397	0.563
Baseline Mean Enrollment Rate After Two Years	0.388	0.288	0.443
Observations	2174529	779372	1395157

Notes. The initial dataset is a one-third random sample of all California FAFSA submissions reported to the California Student Aid Commission between 2015 and 2019. This analysis restricts to a subsample of students who had submitted a FAFSA, and then regresses a set of year dummies and covariates (as described in the text) on the associated outcome. We use 2015 as the reference year, and this table reports estimates from just the coefficient on the 2017 year dummy. Each row derives from a separate regression. Total state aid received is adjusted for yearly tuition increases. Standard errors are clustered by students' zip code of residence.

Appendix Figure 1. Full sample, changes in enrollment rates across years
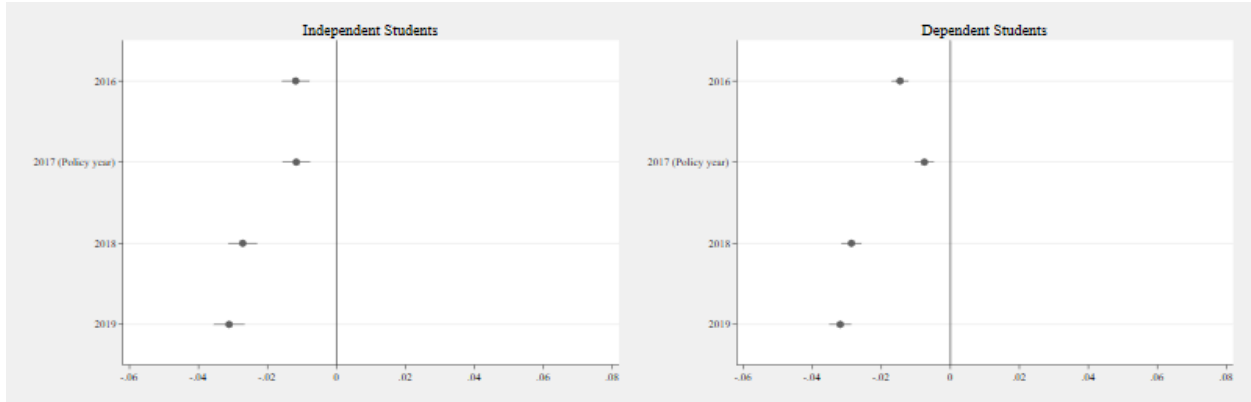
Markers and bars represent coefficients and 95% confidence intervals from a regression predicting refile rates separately for independent and dependent students. Other coefficients not displayed. Sample consists of a one-third random sample of California FAFSA applications filed between 2014 and 2019 (n=2,174,529 observations), with enrollment outcomes derived from annual enrollment records provided by California's public two-year and four-year (i.e., CSU and UC) colleges. Covariates include dependency status, gender, deciles of age, citizen status, family size dummies, deciles of income, father, mother, and student education level, and indicators for listing colleges on the FAFSA from each sector (i.e., community college; CSU; UC; private non-profit; private for-profit). Standard errors are clustered by students' zip code of residence.

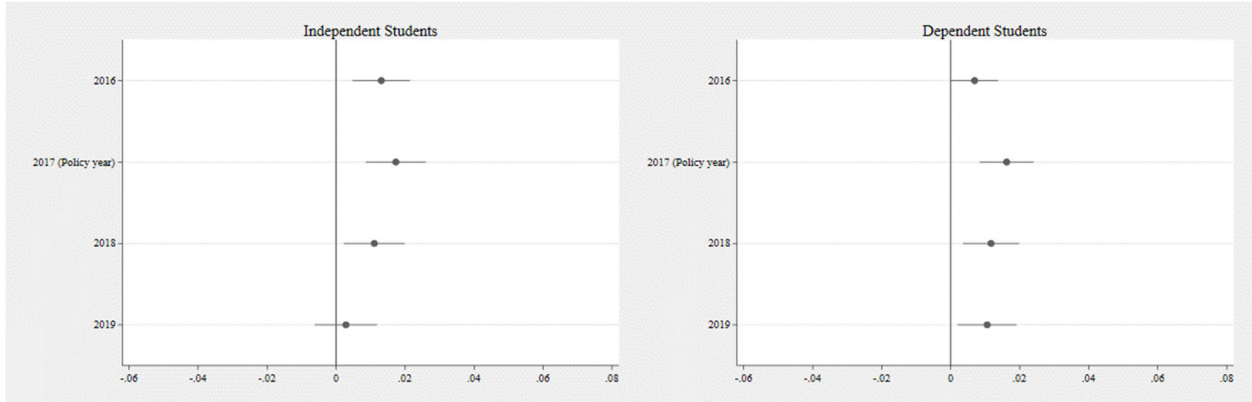Appendix Figure 2. NSC subsample, changes in refiling rates across years

Markers and bars represent coefficients and 95% confidence intervals from a regression predicting refile rates separately for independent and dependent students. Other coefficients not displayed. Sample consists of a match to National Student Clearinghouse (NSC) data as described in the text (n=320,053 observations), with enrollment outcomes derived from annual NSC records. Covariates include dependency status, gender, deciles of age, citizen status, family size dummies, deciles of income, father, mother, and student education level, and indicators for listing colleges on the FAFSA from each sector (i.e., community college; CSU; UC; private non-profit; private for-profit). Standard errors are clustered by students' zip code of residence.

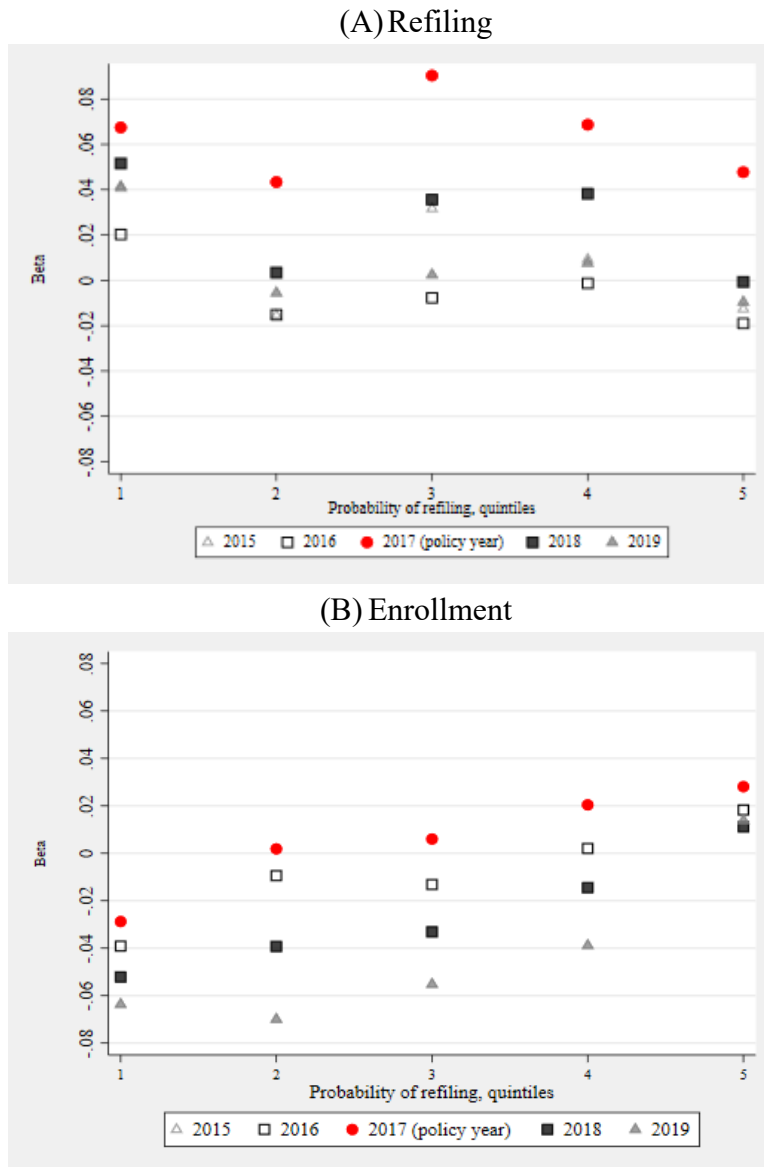Appendix Figure 3. NSC subsample, changes in enrollment rates across years

Notes. Markers and bars represent coefficients and 95% confidence intervals from a regression predicting refile rates separately for independent and dependent students. Other coefficients not displayed. Sample consists of a match to National Student Clearinghouse (NSC) data as described in the text (n=320,053 observations), with enrollment outcomes derived from annual NSC records. Covariates include dependency status, gender, deciles of age, citizen status, family size dummies, deciles of income, father, mother, and student education level, and indicators for listing colleges on the FAFSA from each sector (i.e., community college; CSU; UC; private non-profit; private for-profit). Standard errors are clustered by students' zip code of residence.

Appendix Figure 4. Refiling and enrollment changes by predicting quintile for FAFSA refiling,

Independent students only

(A) Refiling

(B) Enrollment

Markers and bars represent coefficients and 95% confidence intervals from a regression predicting refile rates by quintiles of predicted refiling, as described in the text. Estimates derive from a one-third random sample of California FAFSA applications filed between 2014 and 2019 (n=779,372 Independent observations), with enrollment outcomes from enrollment records provided by California's public two-year and four-year colleges. Covariates include dependency status, gender, deciles of age, citizen status, family size dummies, deciles of income, father, mother, and student education level, and indicators for listing colleges on the FAFSA from each sector (i.e., community college; CSU; UC; private non-profit; private for-profit). Standard errors are clustered by students' zip code of residence.

Appendix Table 1: Changes in student outcomes in 2017 year of "prior prior year" implementation, NSC subsample

	All Students	Independent Students	Dependent Students
	(1)	(2)	(3)
Refiling outcomes			
Refiled in Following Year by June 1	0.014**	0.052**	-0.023**
	(0.003)	(0.005)	(0.004)
Refiled in Following Year by March 3 (state aid deadline)	0.001	0.034**	-0.030**
	(0.003)	(0.005)	(0.005)
Cal Grant outcomes			
Received Cal Grant Disbursement	-0.000	0.003	0.006+
	(0.002)	(0.003)	(0.003)
Total Amount Received	-44.982**	17.558	-16.832
	(16.974)	(14.594)	(29.423)
Enrollment outcomes			
Enrolled in Following Year	0.020**	0.017**	0.016**
	(0.003)	(0.004)	(0.004)
Enrolled in Following Year, Two-Year Institutions	0.018**	0.014**	0.015**
	(0.003)	(0.004)	(0.004)
Enrolled in Following Year, Four-Year Institutions	-0.001	-0.000	0.001
	(0.003)	(0.003)	(0.004)
Enrolled After Two Years	0.004	-0.000	0.004
	(0.003)	(0.004)	(0.004)
Enrolled or Earned Degree After Two Years	0.010**	0.007	0.007+
	(0.003)	(0.004)	(0.004)
Baseline Mean Refile Rate (by Mar 3)	0.504	0.396	0.626
Baseline Mean Refile Rate (by Jun 1)	0.541	0.426	0.671
Baseline Mean Enrollment Rate	0.592	0.510	0.685
Observations	257939	140829	117110

Notes. The initial dataset is a one-third random sample of all California FAFSA submissions reported to the California Student Aid Commission between 2015 and 2019, which is then restricted to a smaller random sample that was matched to National Student Clearinghous data (approximately 10% of Dependent students and either 40 or 80% of Independent students, depending on the year, as described in the text). This analysis restricts to a subsample of students with nonmissing demographic characteristics who had submitted a FAFSA, and then regresses a set of year dummies and covariates (as described in the text) on the associated outcome. We use 2015 as the reference year, and this table reports estimates from just the coefficient on the 2017 year dummy. Each row derives from a separate regression. Total state aid received is adjusted for yearly tuition increases. Standard errors are clustered by students' zip code of residence.

Appendix Table 2: Replication of main results (Table 2) using logistic regression

	All Students	Independent Students	Dependent Students
	(1)	(2)	(3)
Refiling outcomes			
Refiled in Following Year by June 1	0.021**	0.056**	0.001
	(0.001)	(0.002)	(0.001)
Refiled in Following Year by March 3 (state aid deadline)	0.019**	0.041**	0.006**
	(0.001)	(0.002)	(0.001)
Cal Grant outcomes			
Received Cal Grant Disbursement	0.013**	0.002*	0.019**
	(0.001)	(0.001)	(0.001)
Total Amount Received	0.011**	0.001+	0.017**
	(0.001)	(0.001)	(0.001)
Enrollment outcomes			
Enrolled in Following Year	-0.009**	-0.012**	-0.007**
	(0.001)	(0.002)	(0.001)
Enrolled in Following Year, Two-Year Institutions	-0.009**	-0.016**	-0.008**
	(0.001)	(0.002)	(0.001)
Enrolled in Following Year, Four-Year Institutions	0.002**	0.004**	0.002*
	(0.001)	(0.001)	(0.001)
Enrolled After Two Years	-0.006**	-0.001	-0.010**
	(0.001)	(0.002)	(0.001)
Baseline Mean Refile Rate (by Mar 3)	0.431	0.262	0.524
Baseline Mean Refile Rate (by Jun 1)	0.532	0.405	0.601
Baseline Mean Enrollment Rate	0.504	0.397	0.563
Baseline Mean Enrollment Rate After Two Years	0.388	0.288	0.443
Observations	2174529	779372	1395157

Notes. The initial dataset is a one-third random sample of all California FAFSA submissions reported to the California Student Aid Commission between 2015 and 2019. This analysis restricts to a subsample of students who had submitted a FAFSA, and then regresses a set of year dummies and covariates (as described in the text) on the associated outcome. We use 2015 as the reference year, and this table reports estimates from just the coefficient on the 2017 year dummy. Each row derives from a separate regression. Total state aid received is adjusted for yearly tuition increases. Standard errors are clustered by students' zip code of residence.

Appendix Table 3: Likelihood of refiling the FAFSA in the following year based on student characteristics

	All Students	Independent Students	Dependent Students
	(1)	(2)	(3)
Independent	-0.021**		
	(0.007)		
Female	0.036**	0.033**	0.039**
	(0.001)	(0.002)	(0.003)
U.S. Citizen	-0.072**	-0.050**	-0.093**
	(0.004)	(0.005)	(0.006)
Income Deciles			
1 (omitted)	--	--	--
2	0.062**	0.062**	0.060**
	(0.003)	(0.006)	(0.004)
3	0.082**	0.087**	0.073**
	(0.003)	(0.006)	(0.004)
4	0.092**	0.096**	0.082**
	(0.003)	(0.006)	(0.004)
5	0.101**	0.102**	0.095**
	(0.003)	(0.005)	(0.005)
6	0.091**	0.093**	0.086**
	(0.003)	(0.005)	(0.005)
7	0.093**	0.096**	0.085**
	(0.003)	(0.005)	(0.006)
8	0.081**	0.082**	0.074**
	(0.004)	(0.005)	(0.007)
9	0.042**	0.039**	0.053**
	(0.004)	(0.005)	(0.008)
10	-0.054**	-0.063**	-0.012
	(0.004)	(0.006)	(0.012)
Rising Year in College			
Freshman, Never Attended College (omitted)	--	--	--
Freshman, Some College Experience	0.084**	0.068**	0.092**
	(0.003)	(0.003)	(0.005)
Sophomore	0.200**	0.201**	0.194**
	(0.003)	(0.003)	(0.005)
Junior	0.226**	0.243**	0.217**
	(0.003)	(0.004)	(0.005)
Senior	-0.043**	-0.044**	-0.020**
	(0.004)	(0.005)	(0.006)
Fifth Year +	-0.080**	-0.162**	0.025**
	(0.005)	(0.006)	(0.007)
Institution Type Listed In FAFSA			
CC (omitted)	--	--	--
CSU	0.119**	0.120**	0.100**
	(0.003)	(0.003)	(0.007)
UC	0.088**	0.078**	0.057**
	(0.003)	(0.003)	(0.007)
Private Four-Year	0.022**	0.026**	0.004
	(0.003)	(0.003)	(0.007)
Vocational	-0.147**	-0.174**	-0.107**
	(0.004)	(0.005)	(0.008)
None Listed	-0.065**	-0.090**	-0.025**
	(0.003)	(0.004)	(0.007)
Constant	0.462**	0.423**	0.119+
	(0.033)	(0.042)	(0.063)
N	438540	280759	157781

Notes. The initial dataset is a one-third random sample of all California FAFSA submissions reported to the California Student Aid Commission between 2015 and 2019. This analysis restricts to a subsample of students who had submitted a FAFSA in 2015, and then regresses a set of covariates (as described in the text) on whether the student refiles a FAFSA in the following year. Additional variables, including student age deciles, mother and father education levels, and family size, are included in regressions but omitted from display. Older students (i.e., students with higher age deciles) and students with lower mother and father education levels are less likely to refile. There is no association between family size and the likelihood of refiling. Standard errors are clustered by students' zip code of residence.

Appendix Table 4. Summary Statistics by Year

	2014	2015	2016	2017	2018	2019
% Refilers	0.53	0.54	0.55	0.54	0.54	0.54
Independent	0.36	0.35	0.35	0.37	0.36	0.35
Female	0.59	0.59	0.59	0.59	0.60	0.60
US Citizen	0.94	0.94	0.94	0.95	0.95	0.95
Age at Application						
19 and Below	0.29	0.29	0.29	0.28	0.30	0.30
20-24	0.44	0.44	0.44	0.43	0.42	0.41
25+	0.27	0.26	0.27	0.29	0.29	0.29
Income ($)	49615.70	50970.22	52315.38	51502.05	54241.02	57495.10
Family Size	3.43	3.43	3.43	3.40	3.42	3.38
Year in College						
No Prior College/Freshman	0.25	0.25	0.25	0.25	0.25	0.25
Some Prior College/Freshman	0.16	0.15	0.14	0.15	0.14	0.14
Second Year/Sophomore	0.22	0.22	0.22	0.22	0.22	0.22
Third Year/Junior	0.20	0.21	0.21	0.21	0.21	0.21
Fourth Year/Senior	0.12	0.12	0.13	0.12	0.12	0.13
Fifth Year +	0.05	0.05	0.05	0.05	0.05	0.05
Parent Education Level						
Less than High School	0.11	0.11	0.11	0.11	0.11	0.11
High School	0.36	0.35	0.35	0.35	0.35	0.35
College or Beyond	0.43	0.43	0.43	0.43	0.44	0.45
Unknown	0.10	0.10	0.10	0.10	0.10	0.09
Number of Schools Listed	1.91	1.91	1.95	2.03	2.07	2.04
Listed CC	0.47	0.47	0.47	0.48	0.47	0.44
Listed CSU	0.31	0.32	0.33	0.33	0.33	0.35
Listed UC	0.15	0.15	0.16	0.17	0.17	0.17
Student-Year Observations	438541	436222	419311	441322	439133	435328

Notes: Columns indicate year of FAFSA filings. % Refilers indicates the share of applicants in a given year who are also observed filing an application in the year prior. Certain student characteristics (i.e., dependency, gender, citizenship, age, income, family size, year in college, parent education level) are self-reported in the FAFSA application. Parent education level reflects the maximum education level of the father and mother of the student as reported on the application. 2017 = Policy year

Appendix 1. Data Matching Details

In our primary sample, we focus on one-third of all FAFSA filers between 2014 and 2019. We remove students who self-report that they were currently enrolled in graduate school, had already earned a BA degree, or had an income above $200,000.

We use two data sources to measure postsecondary enrollment. We primarily rely on enrollment records received by CSAC from all public two- and four-year colleges. Although these records theoretically encompass all students in California public colleges, in more recent years the data are missing for a few UC campuses. Specifically, reported enrollment counts are low for UC Santa Cruz, UC Berkeley (beginning in 2018-19), and UC Riverside (beginning in 2019-20). We observe no issues in any data related to CC or CSU enrollment.

As a robustness check we matched a subsample of our data to National Student Clearinghouse (NSC) records on postsecondary enrollment. The benefit of NSC data is that we can observe college enrollment at most in-state, private and out of state colleges (Dynarski, Hemelt, & Hyman, 2015), though one key difference between CSAC and NSC data is that CSAC's enrollment records are matched internally by their organization through student SSN, whereas NSC matches by name and birthdate.

NSC data does seem to improve observed postsecondary coverage, as college enrollment is nine percentage points higher in the NSC sample (59% versus 50%, when comparing Appendix Table 1 to Table 2). Yet prior work shows that of California's high school students who attend college, roughly 85% enroll in an in-state public two-year or four-year colleges. Although that brief does not cover older students, we believe results for non-traditional students are even more likely to favor in-state, two-year colleges over any out of state enrollment. In addition, smaller,

private colleges, especially for-profits, are not well covered by NSC data, so adding these data will significantly expand observed coverage of postsecondary enrollment.

We prioritized independent students in the NSC match due to the larger observed refiling impacts (shown in main body of the paper) and the monetary cost of NSC matching. We matched 88,805 independents, where we randomly chose 80% of the 2016 and 2017 years (e.g., the year before and year of policy implementation) and 40% of two additional years in each direction (2014, 2015, 2017, and 2019). We also matched 57,862 dependents, which were a random 10% subsample of all dependents who first filed between 2014 and 2019.