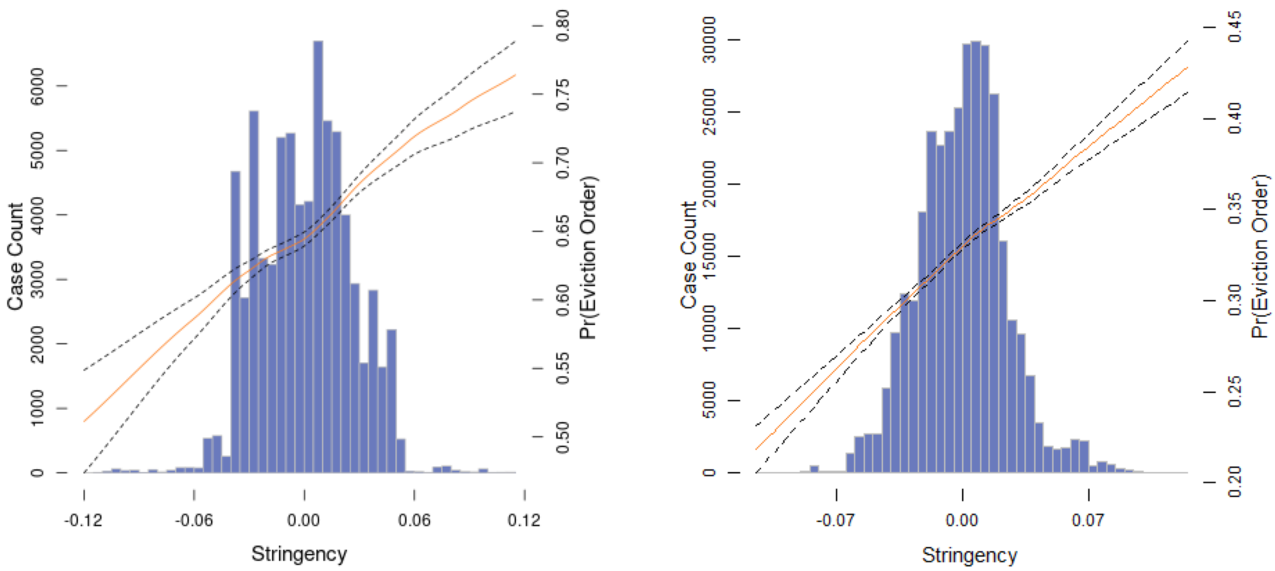
A Additional Tables and Figures

A.1 Validity of the empirical design

First stage. Figure A.1 shows the distribution of judge stringency (residualized by court-year-quarter). Table A.1 presents first stage estimates for our three samples.

Figure A.1: Judge Stringency in the Linked Education Sample

(a) Chicago **(b) New York**



Notes: For each location, this figure shows a histogram of the mean-standardized distribution of judge stringency, $Z_{j(i)}$, with the number of cases indicated along the left vertical axis. Each panel also depicts fitted values of the first-stage regression of eviction on judge stringency and district-year fixed effects (solid line, plotted along the right vertical axis). Dotted lines indicate 95% confidence intervals. The probability of eviction is plotted on the right y-axis against the mean-standardized year-specific judge stringency for judges who see at least 100 cases per year, shown on the x-axis.

Table A.1: First Stage (Education and Census Samples)

	Chicago Public Schools		New York		Census	
	(1)	(2)	(3)	(4)	(5)	(6)
Judge Stringency	1.058***	1.048***	0.842***	0.836***	0.939***	0.931***
	(0.090)	(0.088)	(0.044)	(0.044)	(0.100)	(0.097)
Controls	No	Yes	No	Yes	No	Yes
Observations	74,296	74,296	254,218	254,218	49,000	49,000
F-statistic	137.159	140.646	361.833	362.726	87.510	92.310

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. This table reports results from the first stage regression of eviction on judge stringency for Chicago and New York using the linked student sample and the Census analysis sample. Columns (1) and(3) include our judge stringency measure with district-year and age at filing date fixed effects. Columns (2) and (4) add controls (age race, gender age, free/reduced price lunch, and IEP status), three-year average lagged outcomes (percent absent, math and reading scores, indicator for retained), and dummies for missing controls. Column (5) represents a regression at the child-case level of an eviction indicator on judge stringency, and controls only for district-year fixed effects. Column (6) adds the main IV controls. Standard errors are shown in parentheses and are clustered at the judge-year level. Approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-P2476-R10965.

Balance. Table A.2 presents balance tests for the education samples. Table A.3 presents balance tests for the Census sample.

Table A.2: Balance Test (Education Sample)

	Chicago		New York	
	Evicted (1)	Stringency (2)	Evicted (3)	Stringency (4)
Amount Owed	0.013***	0.000	0.061***	0.000
	(0.001)	(0.000)	(0.002)	(0.000)
Tenant has Lawyer	-0.233***	0.000	-0.156***	0.000
	(0.014)	(0.001)	(0.014)	(0.001)
Female	0.003	0.000	0.000	-0.000
	(0.003)	(0.000)	(0.002)	(0.000)
Black	0.022	0.001	-0.025***	-0.000
	(0.016)	(0.001)	(0.006)	(0.000)
Hispanic	0.041**	0.002**	-0.004	-0.000
	(0.017)	(0.001)	(0.007)	(0.000)
Age	-0.003***	0.000	-0.005***	-0.000
	(0.001)	(0.000)	(0.000)	(0.000)
FRP Lunch	0.011	-0.001	0.007**	0.000
	(0.007)	(0.001)	(0.003)	(0.000)
Learning IEP/Disabled	-0.007	-0.000	0.001	-0.000
	(0.009)	(0.000)	(0.003)	(0.000)
Speech IEP/Impairment	-0.004	-0.001	-0.006	-0.000
	(0.013)	(0.001)	(0.004)	(0.000)
IEP			-0.012***	0.000
			(0.004)	(0.000)
Born in NYC			-0.041***	-0.000
			(0.003)	(0.000)
Pct Absent	0.232***	0.001	0.236***	0.000
	(0.028)	(0.001)	(0.012)	(0.001)
Reading Score	-0.013***	0.000	-0.006***	0.000
	(0.005)	(0.000)	(0.002)	(0.000)
Math Score	-0.008*	-0.000	-0.001	-0.000
	(0.005)	(0.000)	(0.002)	(0.000)
Retained	0.015	0.001	-0.007	-0.000
	(0.012)	(0.001)	(0.005)	(0.000)
Observations	74,296	74,296	254,220	254,220
Joint F-statistic	40.544	0.996	64.847	0.831
P-Value	0.000	0.462	0.000	0.691

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Columns (1) and (3) present results from a regression of eviction on student characteristics and lagged outcomes from the school year before the case. Columns (2) and (4) show the same exercise with judge stringency as the dependent variable. All regressions include indicators for each right-hand side variable having a missing value, which are not reported in the table, and fixed effects for district-year of the case. We perform an F-test on the null hypothesis that all coefficients are equal to zero and report the p-value. Standard errors are shown in parentheses and are clustered at the judge-year level.

Table A.3: Balance Test (Census Sample)

	Evicted (1)	Judge stringency (2)
Age at case	-0.000	0.000
	(0.001)	(0.000)
Female	-0.003	-0.000
	(0.004)	(-0.000)
Black	-0.003	-0.001
	(0.014)	(-0.001)
White	0.020	0.000
	(0.016)	(0.000)
Hispanic	0.009	-0.001
	(0.010)	(-0.001)
Single mom (2000)	-0.016	-0.000
	(0.010)	(-0.000)
Single dad (2000)	-0.004	-0.004
	(0.018)	(0.000)
Two parent (2000)	-0.010	-0.010
	(0.014)	(-0.001)
Grandchild of h.h. head (2000)	-0.010	-0.000
	(0.010)	(-0.000)
Doubling up (2000)	0.025***	-0.000
	(0.010)	(-0.000)
Neighborhood poverty rate	-0.152***	-0.002
	(0.022)	(-0.002)
Neighborhood fraction Hispanic	0.229***	0.002
	(0.024)	(0.002)
Neighborhood fraction White	0.111**	0.001
	(0.051)	(0.001)
Neighborhood fraction Black	0.249***	0.002
	(0.047)	(0.002)
Missing neighborhood char.	0.582***	0.004
	(0.166)	(0.004)
Observations	53,000	49,000
F-statistic	19.060	0.760
P-value	0.000	0.717

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. The table above reports tests of balance for our Census analysis sample. The left column presents a regression where the dependent variable is the eviction indicator, which is regressed on our main controls and district-year of the case fixed effects. The right column presents the same regression except the dependent variable is judge stringency. We perform an F-test on the null hypothesis that all coefficients are equal to zero and report the p-value. Approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-P2476-R10965.

Monotonicity checks. We now provide the results of tests of the monotonicity assumption. We first consider the education samples. Table A.4 reports the coefficient on judge stringency from running the first stage on the sample listed in the first column. In both cities, the first stage coefficient is positive for all subsamples and is relatively stable across subsamples. Following Bhuller et al. (2020) and Norris et al. (2021), Table A.5 runs the first stage regression where judge stringency is calculated on one sub-population of kids (e.g., female) and then estimates the first-stage on the complementary sub-population (e.g., not female). The coefficients are all positive. Lastly, Table A.6 replicates these analyses for the Census sample, obtaining the same conclusions.

Table A.4: Single-Sample Monotonicity Checks (Education Sample)

Sample	Chicago (1)	New York (2)
Main	1.066***	0.848***
	(0.095)	(0.04)
Kid is female	1.092***	0.827***
	(0.107)	(0.056)
Kid is Black	1.005***	0.768***
	(0.118)	(0.069)
Kid is Hispanic	1.182***	0.92***
	(0.201)	(0.057)
Defendant is female	1.102***	0.874***
	(0.12)	(0.049)
Defendant is Black	1.028***	0.834***
	(0.134)	(0.071)
Defendant is Hispanic	0.97***	0.876***
	(0.232)	(0.055)
Attorney	0.769**	0.306
	(0.388)	(0.902)
No attorney	1.084***	0.847***
	(0.098)	(0.04)

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. This table reports results from Chicago and New York for the first-stage regressions of eviction on judge stringency. We use the IV sample. For each row, we calculate judge stringency using the analysis sample and run the first stage on the subsample listed. Standard errors are shown in the second column and are clustered at the judge(courtroom)-year level.

Table A.5: Split-Sample Monotonicity Checks (Education Sample)

Stringency Sample	First Stage Sample	Chicago (1)	New York (2)
DOE/CPS link	Not DOE/CPS link	0.426***	0.624***
		(0.04)	(0.035)
Not DOE/CPS link	DOE/CPS link	1.188***	0.857***
		(0.104)	(0.047)
Defendant is female	Defendant is not female	0.542***	0.924***
		(0.165)	(0.049)
Defendant is not female	Defendant is female	0.35***	0.676***
		(0.105)	(0.05)
Defendant is black	Defendant is not black	0.341***	0.813***
		(0.117)	(0.055)
Defendant is not black	Defendant is black	0.257***	0.63***
		(0.089)	(0.067)
Defendant is Hispanic	Defendant is not Hispanic	0.326***	0.465***
		(0.108)	(0.071)
Defendant is not Hispanic	Defendant is Hispanic	0.188	0.96***
		(0.152)	(0.059)

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. For each city, this table reports results for first stage regressions of eviction on judge stringency. For each row, we calculate judge stringency using the subsample listed under "Stringency Sample", and we run the first stage on the subsample listed under "First Stage Sample". For example, the first row depicts a first stage on the sample of cases linked to our education records, with our measure of judge stringency calculated based on the sample of cases not linked to education records. Sample restrictions include judges who see 50 or more cases in addition to IVOLS restrictions. "Joint Action Case" is an indicator for if the case was a joint action case and is specific to Chicago. Standard errors are depicted in parentheses and are clustered at the judge(courtroom)-year level.

Table A.6: Single- and Split- Sample Monotonicity Checks (Census Sample)

Sample	Coefficient	Standard Errors	Observations
Male	1.037***	0.117	24,500
Male (out-of-sample instrument)	0.996***	0.152	26,500
Female	0.830***	0.106	24,500
Female (out-of-sample instrument)	0.793***	0.113	26,500
Age K-12	0.915***	0.101	37,500
Age K-12 (out-of-sample instrument)	0.875***	0.126	41,000

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. The table above reports monotonicity tests of the Census analysis sample. The first row reports the first-stage regression for the subgroup of male children. The second row reports the first-stage regression for the male subgroup, using all other cases to construct the judge stringency instrument. The next rows perform the same exercise for the subgroup of female children, and for the subgroup of children aged 6-18 (the K-12 subgroup). Approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-P2476-R10965.

A.2 Estimating proportion of households facing eviction with children

Table A.7: Census Sample: Estimating the Proportion of Households Facing Eviction With Children

	2010 Decennial (1)	2000 Decennial (2)
Share of households with children		
Option 1: Randomized	0.558	0.630
Option 2: Household head	0.534	0.597
Option 3: Female first	0.560	0.631
Number of children per household (among those with children)		
Option 1 (random)	2.342	2.472

Notes: The table above merges tenants in case years indicated in the column heading to the Decennial Census year indicated in the column heading. In cases with more than one tenant listed, we select one tenant according to three different rules (indicated in the row): (i) randomly choosing the tenant, (ii) choosing the Census household head, (iii) choosing the female first and if there are multiple female adults we choose one at random. We then report the proportion of these tenants with children aged 0-18 in the household, and, in the last row, the number of children per household (for those with children). Approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-P2476-R10965.

A.3 Additional details and results on trends around eviction filing

Figures 1-3 and the figures in this Appendix display regression estimates of β_r and $\beta_r + \delta_r$ from the regression in (4.1), with the non-evicted group mean in the omitted period added to both sets of coefficients. As discussed in Section 4.4, the exact specification depends on whether we consider annual data from the education sample, monthly data from the education sample, or annual data from the Chicago Census sample. However, in all cases, we can interpret the plotted estimates as means that have been re-weighted to match the time and case location characteristics of the non-evicted group in the omitted period. To see why, let $X_{i,-1}$ collect the additional fixed effects in (4.1) for a student i in the omitted period and assume (4.1) is correctly specified so that

$$\mathbb{E}[Y_{i,r}|E_i = e, X_{i,-1}] = \alpha + \sum_{r=-3;r\neq-1}^{3} \beta_r + \sum_{r=-3}^{3} \delta_r \times \mathbb{1}[E_i = e] + \gamma X_{i,-1}.$$

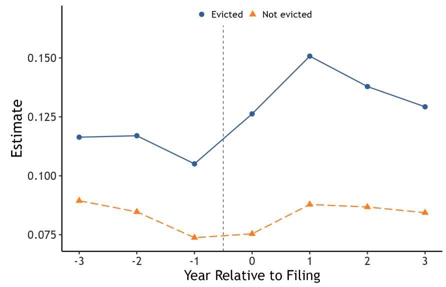
In this notation, $\mathbb{E}\left[\mathbb{E}[Y_{i,r}|E_i = e, X_{i,-1}]\middle|E_i = 0\right]$ is the mean of $Y_{i,r}$ for the non-evicted group in the baseline period. Using the above equation, this value equals

$$\begin{aligned}\mathbb{E}\left[\mathbb{E}[Y_{i,r}|E_i = e, X_{i,-1}]\middle|E_i = 0\right] =& \beta_r \mathbb{1}[r \neq -1] + \delta_r \mathbb{1}[e = 1] + \mathbb{E}[\alpha + X_{i,-1}|E_i = 0] \\ =& \beta_r \mathbb{1}[r \neq -1] + \delta_r \mathbb{1}[e = 1] + \mathbb{E}[Y_{i,-1}|E_i = 0],\end{aligned}$$

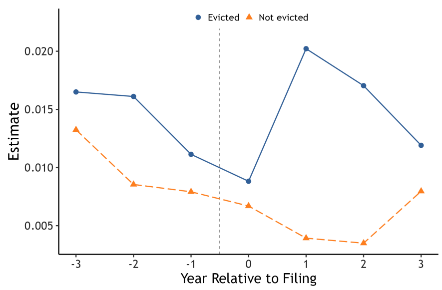
which is what we are plotting (noting that we set $\beta_{-1} = 0$ when plotting). Similar arguments hold for the monthly education sample and annual Census sample specifications.

Figure A.2: Chicago Education Sample: McKinney-Vento

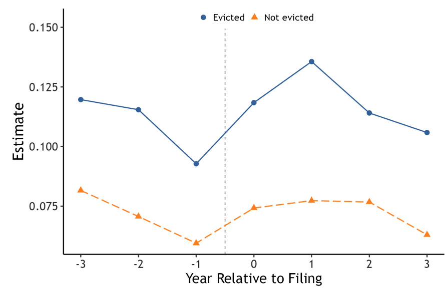
A. McKinney-Vento Flag (CHI)



B. McKinney-Vento Shelter (CHI)



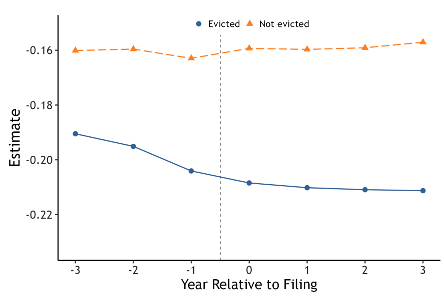
C. McKinney-Vento Doubling Up (CHI)



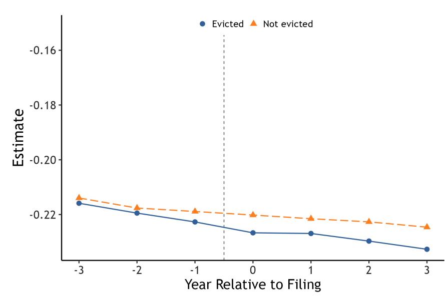
Notes: Each panel displays annual trends from -3 to 3 years relative to eviction filing for children in the Chicago education sample using the panel structure of the data. Panels A plots trends for a McKinney-Vento flag for student homelessness, which primarily indicates living doubled-up or at a homeless shelter. The definition of "doubled-up" that is used to determine a student's McKinney-Vento status is "children and youths who are sharing the housing of other persons due to loss of housing, economic hardship, or a similar reason" (42 U.S.C. Section 11434(b)(2)). Panels B and C plot trends separately for each of these two living situations. See equation 4.1 and related discussions in Section 4.4 for additional details about the sample and specification.

Figure A.3: Education Sample: School Average Test Scores

A. School's Avg. Test Scores (CHI)

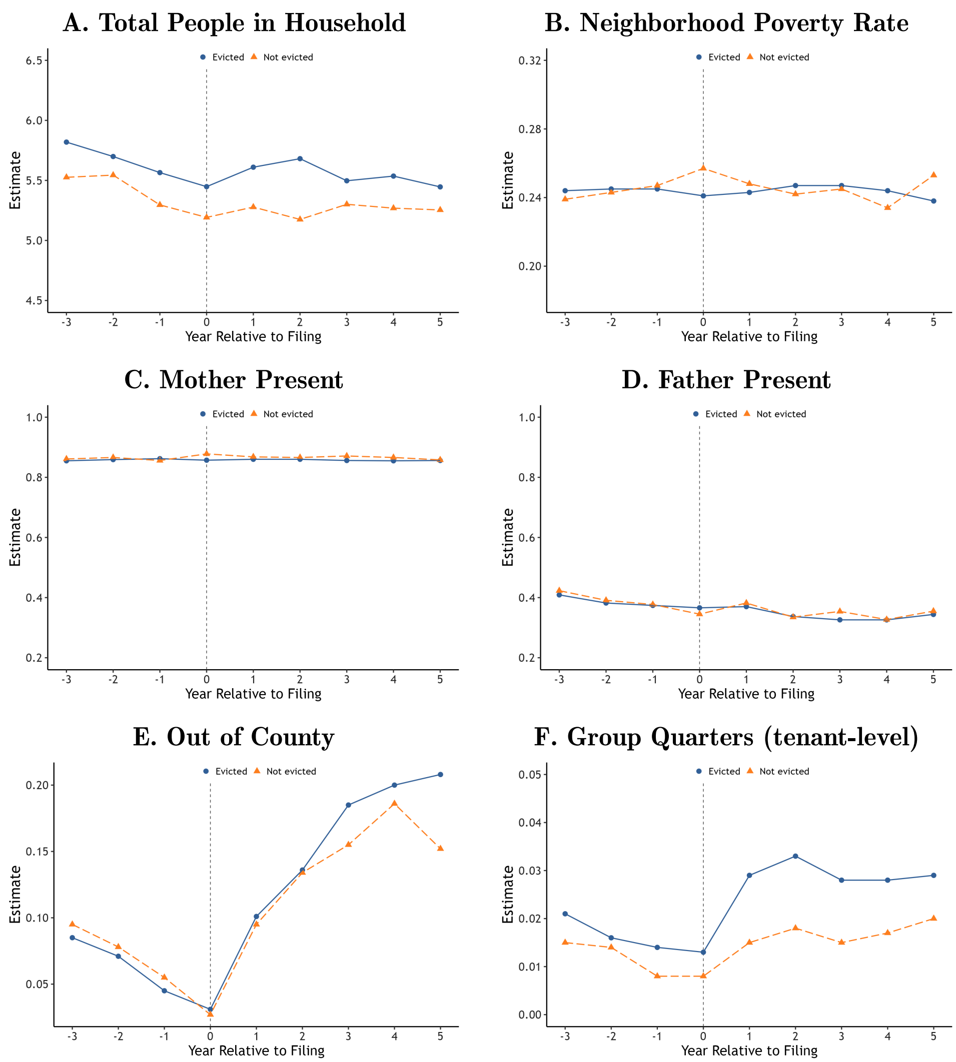


B. School's Avg. Test Scores (NYC)



Notes: Each panel displays trends in outcomes relative to eviction filing. Each panel displays trends in outcomes relative to eviction filing. Panel A (B) plots trends for the Chicago (New York) education sample for the average achievement of the school attended as measured by average test scores and is defined among actively enrolled students. See equation 4.1 and related discussions in Section 4.4 for additional details about the sample and specification.

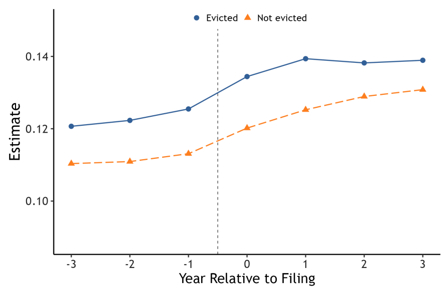
Figure A.4: Census Sample: Additional Trends



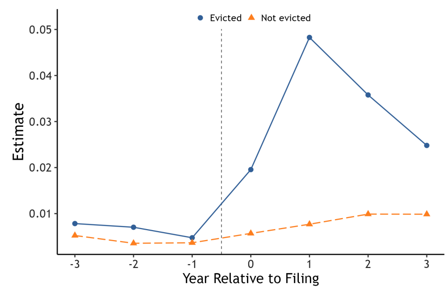
Notes: The panels above use variation in the year of filing relative to the 2010 Census to present trends for children around the time of filing. The sample includes all children age 18 and under (at the time of filing and at the time of the 2010 Census) in households with a tenant linked to the 2010 Census. The panels plot child-case averages in relative time for evicted and nonevicted groups. No controls are included in this regression. Approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-P2476-R11514.

Figure A.5: New York Education Sample: Yearly Trends

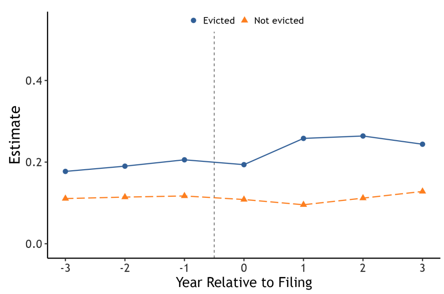
A. Percent Absent (NYC)



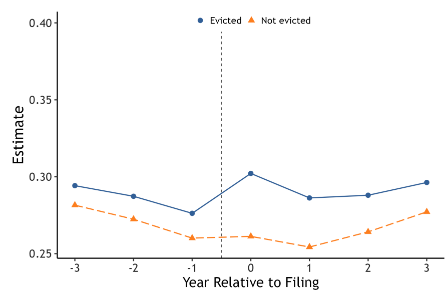
B. Homeless (NYC)



C. Moved (rel. last year) (NYC)



D. Changed School (NYC)



Notes: Each panel displays annual trends from -3 to 3 years relative to eviction filing for children in the New York education sample using the panel structure of the data. Panel A presents the results for the percentage of days the student was absent during the year. Panel B displays the results for an indicator reflecting applications to homeless shelters within the year. Panel C shows the results for an indicator for being observed at an address other than the address of residence in the prior year. Panel D reports the results for an indicator of a change in the school attended compared to the previous year. See equation 4.1 and related discussions in Section 4.4 for additional details about the sample and specification.

A.4 Characterizing compliers

Table A.8: Characterizing Compliers

	Chicago			New York		
	Evicted	Non-evicted	Complier	Evicted	Non-evicted	Complier
Panel A. Characteristics						
Female	0.491	0.491	0.501	0.49	0.492	0.479
			(0.031)			(0.039)
Black	0.764	0.769	0.764	0.396	0.429	0.432
			(0.05)			(0.05)
Ad damnum	2109	1739	1675	4407	3764	2415
			(280)			(1223)
Ad damnum below median	0.466	0.563	0.621	0.421	0.542	0.525
			(0.06)			(0.049)
Panel B. Pre-case outcomes						
Not at pre-case address (in -2)	0.379	0.302	0.317	0.212	0.11	0.096
			(0.05)			(0.025)
Retained (in -1)	0.058	0.052	0.032	0.117	0.122	0.088
			(0.019)			(0.03)
Chronic absent (in -1)	0.414	0.359	0.3	0.445	0.406	0.41
			(0.068)			(0.043)
Percent absent (in -1)	0.117	0.105	0.098	0.113	0.105	0.108
			(0.016)			(0.008)
Reading test score (in -1)	-0.372	-0.307	-0.256	-0.34	-0.307	-0.385
			(0.101)			(0.101)
Math test score (in -1)	-0.411	-0.352	-0.226	-0.394	-0.362	-0.362
			(0.091)			(0.105)
Credits earned (in -1)	0.889	0.893	0.981	0.887	0.907	0.92
			(0.287)			(0.055)
GPA (in -1)	2.046	2.097	2.12			
			(0.336)			
Panel C. Case school year outcomes if not evicted						
Not at pre-case address		0.344	0.342		0.11	0.079
			(0.061)			(0.026)
Chronic absent		0.382	0.342		0.414	0.444
			(0.062)			(0.039)
Percent absent		0.113	0.122		0.126	0.128
			(0.015)			(0.011)
Reading test score		-0.305	-0.376		-0.313	-0.393
			(0.112)			(0.083)
Math test score		-0.351	-0.284		-0.368	-0.479
			(0.106)			(0.083)
Credits earned		0.898	1.083		0.856	0.902
			(0.104)			(0.061)
GPA		2.12	2.385			
			(0.282)			

Notes: * p < 0.1, ** p < 0.05, *** p < 0.01. This table reports evicted, non-evicted, and complier means in the Chicago and New York education samples. Evicted and non-evicted means for Y_i (denoting either a characteristic or outcome) are estimated from sample averages. The complier mean for Y_i is estimated from a TSLS regression with $Y_i(1-E_i)$, treatment $(1-E_i)$, instrument $Z_{j(i)}$, and the same fixed effects as our main IV specification (we omit controls because Y_i is often one of these controls). With a binary instrument (and no controls), this TSLS estimand identifies $\mathbb{E}[Y_i(0)|\text{complier}]$, irrespective of whether Y_i is binary, discrete, or continuous (Abadie, 2003). When Y_i is a treatment-invariant characteristic, this is the mean of that characteristic for compliers, and when Y_i is an outcome, this is the non-evicted mean potential outcome for compliers. Panel A variables are defined as in Table 2, with the additions of "Ad damnum" denoting the amount the landlord is claiming the tenant owes in the case and "Ad damnum below median" denoting an indicator for the ad damnum being less than the median amount. Panel B variables are defined as in Table 2, and are evaluated either in the year prior to the case year (RY-1) or the year before (RY-2). Panel C variables are defined as in Tables 3-7, and are evaluated in the "case school year" (i.e., the school year in which the case was filed and the upcoming year for cases filed in the summer). The samples are restricted to the education analysis samples described in Section 5.1, and, in particular, remove cases that are not randomly assigned or assigned to judges/courtrooms that hear substantially fewer cases than is typical in the setting, which is why some of the evicted and non-evicted moments do not exactly match those in Table 2.

A.5 What predicts graduation?

Table A.9 studies what intermediate outcomes predict high school graduation, focusing on outcomes measured in grades 6-8 (middle school), as well as 9th grade, where we observe additional outcomes, such as credit scores and GPA. The regression is not restricted to children facing eviction. The regression is restricted to individuals for whom graduation and the intermediate outcomes are observed, as described in the table notes. The first column considers only math and reading test scores (averaged across grades 6-8). When considering only test scores, we find that they explain 6 percent of the variation in the graduation outcome in Chicago and 13 percent in New York and have sizable coefficients (with a one standard deviation increase in test scores predicting a 4 to 13 percentage point increase in the probability of graduating). When only considering the proportion of days absent, a chronic absenteeism indicator, and changing residential address in middle school, they explain 11 percent of the variation in graduation rates in Chicago and 23 percent in New York. When including all these measures in a single regression, they explain 14 and 27 percent of the variation in the outcome, respectively. These three regressions imply that absenteeism and residential mobility better predict graduation than test scores, and adding middle school absenteeism and mobility to the regression with test scores notably increases the R-squared.

The fourth and fifth columns of Table A.9 additionally add 9th-grade credits earned, GPA, proportion of days absent, and changing residential address. Column 4 omits test scores yet has large R-squared values of 0.36 for Chicago and 0.53 for New York. Column 5 adds middle-school test scores to the prior regression and only marginally increases its predictive power, with the R-squared rising by 0.0005 in Chicago and 0.005 in New York. Similarly, the coefficient on test scores are substantially smaller than those discussed in the prior paragraph, ranging from -0.0024 (and statistically insignificant) for math scores in Chicago to 0.026 for reading scores in New York. Overall, these results suggest that the outcomes we measure in middle school and 9th grade are quite predictive of graduation.

One question is how our IV estimates on intermediate outcomes compare to our estimates on high school graduation. Using Table A.9 and our IV estimates for the intermediate schooling and housing outcomes, we can construct a back-of-the-envelope estimate of how impacts on intermediate outcomes may affect graduation. Consider a student who is evicted before the start of 8th grade. First, we will consider the regression in column (3) of Table A.9 that includes middle school math and reading scores, percent of days absent, a chronic absenteeism indicator, and an indicator for changing residential addresses. We can multiply the combined IV estimates for each of these outcomes in post-filing school year 1 by the weighted average of the regression coefficients in column (3) for Chicago and New York.[37] Doing so yields a predicted change in graduation of -5.0 percentage points, though this does not include intermediate outcomes such

[37] We use the weights used to combine our IV estimates for high school graduation. Results are similar when using equal weights.

as credits or GPA, which are only observed in high school.

Second, we calculate the predicted change in graduation using the more complete set of predictors in column (5) of Table A.9. As this column uses predictors from middle school and high school, we will need to use IV estimates from both post-filing year 1 and post-filing year 2. Specifically, as we are considering a student evicted before the start of 8th grade, we use the IV estimates for post-filing year 1 for the middle school outcomes (i.e., those in Panel A), as this is when the student would be in 8th grade, and post-filing year 2 for the 9th-grade outcomes (i.e., those in Panel B) as this is when the student would be in 9th grade. We then multiply these combined IV estimates by the coefficients in column 5 of Table A.9, where doing so yields a predicted change in graduation of -12.0 percentage points, which is similar to the -12.5 percentage point reduction in high school graduation we estimate. Overall, this exercise suggests that the impact on intermediate outcomes we estimate can broadly rationalize our estimated change in graduation rates.

Table A.9: Middle and High School Predictors of Graduation

	Chicago					New York				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Intercept	0.8637	0.9774	0.9531	0.31	0.3125	0.7881	0.9732	0.9422	0.2431	0.269
	(0.002)	(0.0033)	(0.0034)	(0.0127)	(0.0127)	(6e-04)	(8e-04)	(8e-04)	(0.0035)	(0.0035)
Panel A. Grades 6-8 variables										
Math test score	0.0566***		0.0285***		-0.0024	0.1324***		0.0564***		0.0085***
	(0.0036)		(0.0035)		(0.0032)	(9e-04)		(9e-04)		(7e-04)
Reading test score	0.031***		0.0303***		0.0139***	0.0374***		0.0498***		0.0259***
	(0.0037)		(0.0035)		(0.0031)	(9e-04)		(8e-04)		(7e-04)
Percent absent		-1.9082***	-1.5759***	-0.176**	-0.1833**		-2.1211***	-1.764***	-0.2858***	-0.2227***
		(0.0828)	(0.0828)	(0.0752)	(0.0754)		(0.0184)	(0.0173)	(0.0137)	(0.0137)
Chonic absent		-0.1191***	-0.1174***	-0.063***	-0.0599***		-0.1515***	-0.1362***	-0.0346***	-0.0354***
		(0.0146)	(0.0144)	(0.0125)	(0.0125)		(0.0038)	(0.0036)	(0.0028)	(0.0028)
Changed address		-0.0518***	-0.0276***	-0.0109	-0.0082		-0.0269***	-0.0085***	-0.0106***	-0.0048***
		(0.0092)	(0.0091)	(0.0079)	(0.0079)		(0.0022)	(0.0022)	(0.0018)	(0.0017)
Panel B. Grade 9 variables										
Credits				0.5627***	0.5785***				0.761***	0.7247***
				(0.0136)	(0.014)				(0.0034)	(0.0034)
GPA				0.0374***	0.0307***					
				(0.002)	(0.0025)					
Percent absent				-0.4981***	-0.4951***				-0.1762***	-0.204***
				(0.0289)	(0.0289)				(0.0053)	(0.0053)
Chonic absent				-0.0388***	-0.0391***				-0.0849***	-0.0791***
				(0.0059)	(0.0059)				(0.0019)	(0.0019)
Changed address				0.003	0.0033				-0.009***	-0.0066***
				(0.0043)	(0.0043)				(0.0014)	(0.0014)
R squared	0.0621	0.1104	0.1356	0.3552	0.356	0.1317	0.2286	0.2721	0.5273	0.5319
Observations	25546	25558	25546	25558	25546	462787	462787	462787	462787	462787

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. The columns of this table report coefficients from regressions of various variables on an indicator for graduating. In all cases, the sample is all students – irrespective of interacting with the court system – in CPS (for Chicago) and NYDOE (for New York) who: (i) are observed in grades 6-9 and have non-missing test score, absenteeism, mobility, and credit variables, (ii) do not transfer out of the district, and (iii) are age 18+ by the end of our panels. For this sample, we observe average test scores, absenteeism, and mobility in grades 6-8, we observe credits, GPA (for Chicago), absenteeism, and mobility in grade 9, and we observe final graduation status (graduated, dropped out, or still enrolled). For each city, the five columns report regressions of different subsets of the considered variables on graduation: column (1) reports coefficients from a regression that only includes average math and reading test scores in grades 6-8, column (2) reports coefficients from a regression that only includes average absenteeism and mobility in grades 6-8, column (3) reports coefficients from a regression that includes all considered variables in grades 6-8, column (4) reports coefficients form a regression that only includes average absenteeism and mobility in grades 6-8 and all considered variables in grade 9, and column (5) reports coefficients from a regression that includes all considered variables in grades 6-8 and grade 9. All variables enter the regressions linearly, and no fixed effects are included. Note that the observation count for Chicago are small (relative to the number of students in CPS) because credits are only observed in 2014- while the panel ends in 2019, so that, for this exercise, we effectively consider students who are in 9th grade in 2014-2015 and able to graduate in 2019.

A.6 Additional IV/OLS results

Table A.10: School Average Test Scores (Education Sample)

	Chicago			New York			Combined		
	$\mathbb{E}[Y\|E=0]$ (1)	OLS (2)	IV (3)	$\mathbb{E}[Y\|E=0]$ (4)	OLS (5)	IV (6)	$\mathbb{E}[Y\|E=0]$ (7)	OLS (8)	IV (9)
Case school year:									
School's Avg. Test Scores	-0.160	-0.022***	-0.055	-0.226	-0.002**	0.014	-0.219	-0.007***	-0.001
	(0.446)	(0.003)	(0.047)	(0.369)	(0.001)	(0.022)	(0.332)	(0.001)	(0.020)
Observations	17,403	50,573	50,573	140,058	188,074	188,074	157,461	238,647	238,647
Post-filing school year 1:									
School's Avg. Test Scores	-0.158	-0.026***	-0.015	-0.230	-0.001	0.063*	-0.221	-0.007***	0.046
	(0.454)	(0.004)	(0.053)	(0.378)	(0.001)	(0.036)	(0.338)	(0.001)	(0.030)
Observations	14,709	42,480	42,480	114,214	152,106	152,106	128,923	194,586	194,586
Post-filing school year 2:									
School's Avg. Test Scores	-0.152	-0.034***	0.032	-0.230	-0.004*	0.056	-0.220	-0.011***	0.051
	(0.459)	(0.005)	(0.059)	(0.388)	(0.002)	(0.048)	(0.346)	(0.002)	(0.040)
Observations	12,094	35,271	35,271	89,188	118,029	118,029	101,282	153,300	153,300

Notes: * p < 0.1, ** p < 0.05, *** p < 0.01. "Case school year" is the school year in which the case was filed and the following year for cases filed in the summer. "Post-filing school year 1" is the first complete school year after the case was filed. "Post-filing school year 2" is the second complete school year after the case was filed. "School average test score" is the average achievement of school attended as measured by average test scores and is defined among actively enrolled students. Columns (1)-(3) report results for Chicago, (4)-(6) report results for New York City, and (7)-(9) report combined results as described in Section 5.4. The first column reports the non-evicted mean (with standard deviations in parentheses), the second reports the coefficient on an eviction indicator from an OLS regression, and the third reports the TSLS estimate for eviction. Means include standard deviations in parentheses, while OLS and TSLS estimates include standard errors in parentheses. Standard errors are clustered at the judge×case-year level. The regression and sample specifications are as described in the notes of Table 3.

Table A.11: More on High School Graduation (Education Sample; Filing in Grades 6 to 12)

	Chicago			New York			Combined		
	$\mathbb{E}[Y\|E=0]$ (1)	OLS (2)	IV (3)	$\mathbb{E}[Y\|E=0]$ (4)	OLS (5)	IV (6)	$\mathbb{E}[Y\|E=0]$ (7)	OLS (8)	IV (9)
Dropped out	0.233	0.038***	0.080	0.212	0.028***	0.134**	0.213	0.029***	0.128**
	(0.423)	(0.007)	(0.089)	(0.409)	(0.003)	(0.056)	(0.382)	(0.003)	(0.051)
Graduated on time	0.711	-0.040***	-0.083	0.568	-0.037***	-0.044	0.578	-0.037***	-0.049
	(0.453)	(0.007)	(0.091)	(0.495)	(0.003)	(0.067)	(0.463)	(0.003)	(0.060)
Observations	6,021	16,202	16,202	83,384	119,604	119,604	89,405	135,807	135,807

Notes: * p < 0.1, ** p < 0.05, *** p < 0.01. "Case school year" is the school year in which the case was filed and the following year for cases filed in the summer. "Post-filing school year 1" is the first complete school year after the case was filed. "Post-filing school year 2" is the second complete school year after the case was filed."Dropped out" is an indicator for if the student dropped out of high school, conditional on seeing the student through at least age 18. Dropping out is not the exact reverse of graduating because some students may appear as "still enrolled" in the education records. "Graduated on time" is an indicator for students who graduate within four years of first entering 9th grade and is defined for students who are actively enrolled in 9th grade at some point in our panels. Columns (1)-(3) report results for Chicago, (4)-(6) report results for New York City, and (7)-(9) report combined results as described in Section 5.4. The first column reports the non-evicted mean (with standard deviations in parentheses), the second reports the coefficient on an eviction indicator from an OLS regression, and the third reports the TSLS estimate for eviction. Means include standard deviations in parentheses, while OLS and TSLS estimates include standard errors in parentheses. Standard errors are clustered at the judge×case-year level. The regression and sample specifications are as described in the notes of Table 3. For each column, the final row reports the average sample size across outcomes.

Table A.12: Living Arrangements, Household Structure, and Geography (Census Sample; ages 6-18)

	$\mathbb{E}[Y\|E=0]$ (1)	OLS (2)	IV (3)
Living Arrangements			
Total household size	4.809	0.139***	0.808
		(0.025)	(0.543)
Doubling up (incl. grandparents)	0.212	0.029***	0.254***
		(0.006)	(0.081)
Doubling up (excl. grandparents)	0.134	0.010**	0.192***
		(0.005)	(0.072)
Household Structure			
Mother present	0.855	-0.025***	0.006
		(0.004)	(0.065)
Father present	0.302	0.004	-0.004
		(0.005)	(0.093)
Single mother	0.577	-0.029***	0.006
		(0.006)	(0.094)
Non-relative household head	0.015	0.003**	-0.004
		(0.001)	(0.026)
Multigenerational household	0.090	0.017***	0.146***
		(0.003)	(0.058)
Grandparent household head	0.082	0.017***	0.074
		(0.003)	(0.060)
Geography			
Neighborhood poverty rate	0.234	-0.002	-0.054**
		(0.002)	(0.027)
Out of county	0.224	0.016***	-0.078
		(0.005)	(0.078)
Out of state	0.133	0.016***	0.146
		(0.003)	(0.059)
Observations		40,000	37,000

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. This table reproduces Table 4 except restricts the sample to age 6-18, to allow for comparison with the education K-12 analysis. Observation counts reflect the modal observation counts. Approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-P2476-R10965.

Table A.13: Neighborhood and Multigenerational Households (Census Sample)

	Pr[Lower poverty neighborhood] (1)	Pr[Lower poverty neighborhood ∩ multigen] (2)	Pr[Lower poverty neighborhood ∩ non-multigen] (3)
IV: Evicted	0.099	0.062*	0.037
	(0.066)	(0.036)	(0.075)
Dependent variable mean	0.371	0.037	0.333

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. This table estimates the impact of eviction on living in a lower-poverty Census tract in 2010 relative to the case address (column 1), using our IV specification of Table 4. We interact this outcome with an indicator for the 2010 household being multigenerational and estimate the impact on this interacted outcome in column 2; we also interact this outcome with an indicator for the 2010 household not being multigenerational and estimate the impact on this interacted outcome in column 3. Approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-P2476-R10965.

A.7 Grade at filing IV splits

Appendix Tables A.14–A.15 show pooled (across Chicago and New York) education results separately for younger students with case filings during grades 1-5 (capturing students with filings during elementary school) and for older students with case filings during grades 6-12 (capturing students with filings during middle and high school). We only present home environment and schooling attachment and engagement results because the other main tables present outcomes are primarily observed for only one of these two groups (e.g., credits are only observed for students in grades 9-12). We focus on the combined estimate due to limited sample sizes in the site-by-grade results.

Table A.14: Home Environment by Grade at Filing (Education Sample)

	Grades 1-5 at Filing		Grades 6-12 at Filing		
	$\mathbb{E}[Y\|E=0]$	IV	$\mathbb{E}[Y\|E=0]$	IV	P-value of
	(1)	(2)	(3)	(4)	(2) = (4)
Case school year:					
Not at pre-case address	0.147	0.191***	0.118	0.053	0.031
	(0.303)	(0.048)	(0.269)	(0.043)	
Neighborhood poverty	0.306	0.012	0.300	0.001	0.610
	(0.109)	(0.015)	(0.106)	(0.016)	
Observations	78,494	130,087	82,713	130,620	
Post-filing school year 1:					
Not at pre-case address	0.238	0.209***	0.200	0.043	0.074
	(0.373)	(0.061)	(0.337)	(0.071)	
Number of moves	0.360	0.378***	0.295	0.011	0.020
	(0.623)	(0.107)	(0.558)	(0.115)	
Neighborhood poverty	0.305	0.022	0.300	0.016	0.827
	(0.110)	(0.018)	(0.106)	(0.019)	
Observations	67,959	111,674	58,685	92,820	
Post-filing school year 2:					
Not at pre-case address	0.315	0.176**	0.276	0.195**	0.880
	(0.412)	(0.084)	(0.373)	(0.098)	
Number of moves	0.636	0.611***	0.528	0.201	0.214
	(0.975)	(0.207)	(0.876)	(0.257)	
Neighborhood poverty	0.302	0.039*	0.300	-0.017	0.071
	(0.110)	(0.022)	(0.105)	(0.022)	
Observations	58,660	95,568	38,525	61,421	

Notes: * p < 0.1, ** p < 0.05, *** p < 0.01. "Case school year" is the school year in which the case was filed and the following year for cases filed in the summer. "Post-filing school year 1" is the first complete school year after the case was filed. "Post-filing school year 2" is the second complete school year after the case was filed. "Not at pre-case address" is an indicator for not being at the same address as the pre-case school year. "Number of moves" is the total number of residential address changes recorded by the district since the pre-case school year. "Neighborhood poverty" is the poverty rate of the census tract of residence based on 5-year ACS data. All outcomes are defined among actively enrolled students. Columns (1)-(2) report Chicago and New York combined results for students with case filings in grades 1-5, and (3)-(4) report combined results for students with case filings in grades 6-12. Combined results are constructed as described in Section 5.4. The first column reports the non-evicted mean, and the second reports the TSLS estimate for eviction. Means are accompanied by standard deviations in parentheses, while TSLS estimates are accompanied by standard errors in parentheses. Standard errors are clustered at the judge×case-year level. The regression specifications are as described in the notes of Table 3. For each column and time period, the final row reports the average sample size across outcomes.

Table A.15: Schooling Attachment and Engagement by Grade at Filing (Education Sample)

	Grades 1-5 at Filing		Grades 6-12 at Filing		
	$\mathbb{E}[Y\|E=0]$ (1)	IV (2)	$\mathbb{E}[Y\|E=0]$ (3)	IV (4)	P-value of (2) = (4)
Case school year:					
Not at pre-case school	0.147	0.061	0.169	0.058	0.966
	(0.309)	(0.045)	(0.342)	(0.039)	
Percent absent	0.088	0.009	0.152	0.009	0.960
	(0.070)	(0.007)	(0.171)	(0.013)	
Chronic absent	0.338	0.078	0.461	0.060	0.798
	(0.443)	(0.053)	(0.470)	(0.045)	
Transferred out of school system	0.039	-0.006	0.035	0.020	0.440
	(0.166)	(0.027)	(0.157)	(0.019)	
Observations	86,177	142,178	113,996	175,384	
Post-filing school year 1:					
Not at pre-case school	0.261	0.014	0.286	0.135***	0.126
	(0.389)	(0.059)	(0.417)	(0.052)	
Percent absent	0.087	0.014*	0.172	0.034**	0.300
	(0.072)	(0.008)	(0.193)	(0.017)	
Chronic absent	0.327	0.044	0.493	0.136***	0.222
	(0.440)	(0.056)	(0.472)	(0.050)	
Retained	0.089	0.082***	0.153	0.000	0.086
	(0.261)	(0.031)	(0.338)	(0.036)	
Transferred out of school system	0.045	-0.022	0.038	0.027	0.106
	(0.167)	(0.025)	(0.156)	(0.017)	
Observations	81,411	133,609	99,894	153,026	
Post-filing school year 2:					
Not at pre-case school	0.348	0.026	0.456	0.158**	0.200
	(0.421)	(0.073)	(0.464)	(0.073)	
Percent absent	0.088	0.010	0.190	0.036	0.325
	(0.077)	(0.009)	(0.208)	(0.024)	
Chronic absent	0.328	0.000	0.521	0.119**	0.142
	(0.441)	(0.062)	(0.472)	(0.052)	
Retained	0.117	0.071*	0.187	0.060	0.855
	(0.295)	(0.038)	(0.366)	(0.047)	
Transferred out of school system	0.047	0.028	0.038	0.031	0.927
	(0.166)	(0.025)	(0.148)	(0.019)	
Observations	75,979	124,404	82,011	125,571	

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. "Case school year" is the school year in which the case was filed and the following year for cases filed in the summer. "Post-filing school year 1" is the first complete school year after the case was filed. "Post-filing school year 2" is the second complete school year after the case was filed. "Not at pre-case school is an indicator for being enrolled at a different school relative to the school in the pre-case school year, not counting mechanical school changes due to progressing to a grade that is not available at the prior school. "Percent absent" is the proportion of days absent."Chronic absent" is an indicator for missing more than 10% of school days. "Retained" is an indicator for the grade in the given year being less than what would be implied by a normal progression since the year before the case (RY-1). "Transferred out of school system" is an indicator for if the student exited the school district and transferred to another school. All outcomes are defined among actively enrolled students, with the exception of "transferred out of school system." Columns (1)-(2) report Chicago and New York combined results for students with case filings in grades 1-5, and (3)-(4) report combined results for students with case filings in grades 6-12. Combined results are constructed as described in Section 5.4. The first column reports the non-evicted mean (with standard deviations in parentheses), and the second reports the TSLS estimate for eviction. Means include standard deviations in parentheses, TSLS estimates include standard errors in parentheses. Standard errors are clustered at the judge×case-year level. The regression and sample specifications are as described in the notes of Table 3. For each column and time period, the final row reports the average sample size across outcomes.

A.8 Gender IV splits

Appendix Tables A.16–A.21 show pooled (across Chicago and New York) education results separately by child gender. We focus on the combined estimate due to limited sample sizes in the site-by-gender results.

Table A.16: Home Environment by Gender (Education Sample)

	Girls		Boys		
	$\mathbb{E}[Y\|E=0]$ (1)	IV (2)	$\mathbb{E}[Y\|E=0]$ (3)	IV (4)	P-value of (2) = (4)
Case school year:					
Not at pre-case address	0.134	0.134***	0.134	0.128***	0.921
	(0.286)	(0.047)	(0.285)	(0.042)	
Neighborhood poverty	0.304	0.012	0.303	0.006	0.774
	(0.106)	(0.015)	(0.106)	(0.016)	
Observations	82,230	134,134	84,967	138,566	
Post-filing school year 1:					
Not at pre-case address	0.222	0.150**	0.223	0.124**	0.757
	(0.355)	(0.061)	(0.356)	(0.059)	
Number of moves	0.331	0.279***	0.333	0.151	0.374
	(0.592)	(0.107)	(0.593)	(0.097)	
Neighborhood poverty	0.304	0.026	0.302	0.012	0.567
	(0.107)	(0.019)	(0.106)	(0.017)	
Observations	64,908	105,458	66,676	108,616	
Post-filing school year 2:					
Not at pre-case address	0.303	0.252***	0.300	0.105	0.219
	(0.395)	(0.085)	(0.395)	(0.085)	
Number of moves	0.597	0.770***	0.594	0.075	0.018
	(0.932)	(0.213)	(0.936)	(0.202)	
Neighborhood poverty	0.303	0.023	0.301	0.016	0.803
	(0.107)	(0.025)	(0.106)	(0.020)	
Observations	50,006	81,334	51,472	83,911	

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. "Case school year" is the school year in which the case was filed and the following year for cases filed in the summer. "Post-filing school year 1" is the first complete school year after the case was filed. "Post-filing school year 2" is the second complete school year after the case was filed. "Not at pre-case address" is an indicator for not being at the same address as the pre-case school year. "Number of moves" is the total number of residential address changes recorded by the district since the pre-case school year. "Neighborhood poverty" is the poverty rate of the census tract of residence based on 5-year ACS data. All outcomes are defined among actively enrolled students. Columns (1)-(2) report Chicago and New York combined results for girls, (3)-(4) report results for boys. Combined results are constructed as described in Section 5.4. The first column reports the non-evicted mean, and the second reports the TSLS estimate for eviction. Means are accompanied by standard deviations in parentheses, while TSLS estimates are accompanied by standard errors in parentheses. Standard errors are clustered at the judge×case-year level. The regression specifications are as described in the notes of Table 3. For each column and time period, the final row reports the average sample size across outcomes.

Table A.17: Living Arrangements, Household Structure, and Geography by Gender (Census Sample)

	Girls		Boys		
	$\mathbb{E}[Y\|E=0]$ (1)	IV (2)	$\mathbb{E}[Y\|E=0]$ (3)	IV (4)	P-value of (2) = (4)
Living Arrangements:					
Total household size	4.820	1.255*	4.860	0.233	0.250
		(0.709)		(0.535)	
Doubling up (incl. grandparents)	0.214	0.283**	0.225	0.084	0.207
		(0.134)		(0.083)	
Doubling up (excl. grandparents)	0.131	0.204	0.143	0.026	0.279
		(0.148)		(0.072)	
Household Structure:					
Mother present	0.870	0.101	0.847	-0.049	0.185
		(0.077)		(0.083)	
Father present	0.298	-0.102	0.318	0.084	0.268
		(0.143)		(0.088)	
Single Mother	0.583	0.040	0.560	-0.052	0.591
		(0.135)		(0.105)	
Non-relative household head	0.016	-0.011	0.015	0.007	0.708
		(0.041)		(0.025)	
Multigenerational household	0.096	0.183***	0.098	0.091	0.309
		(0.065)		(0.063)	
Grandparent household head	0.085	0.159***	0.086	0.048	0.188
		(0.063)		(0.056)	
Geography:					
Neighborhood poverty rate	0.237	-0.089**	0.232	-0.021	0.213
		(0.045)		(0.031)	
Out of county	0.234	-0.087	0.234	0.007	0.499
		(0.111)		(0.084)	
Out of state	0.138	-0.037	0.140	-0.008	0.795
		(0.081)		(0.077)	
Observations		24,000		24,000	

Notes: * p < 0.1, ** p < 0.05, *** p < 0.01. This table reports results for the Census sample (Cook County) of two-stage least squares (IV) regressions as in Table 4 except it presents estimates separately by the child's gender. Observation counts reflect the modal observation counts. Approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-P2476-R10965.

Table A.18: Schooling Attachment and Engagement by Gender (Education Sample)

	Girls		Boys		
	$\mathbb{E}[Y\|E=0]$ (1)	IV (2)	$\mathbb{E}[Y\|E=0]$ (3)	IV (4)	P-value of (2) = (4)
Case school year:					
Not at pre-case school	0.158	0.030	0.167	0.118***	0.123
	(0.325)	(0.040)	(0.332)	(0.041)	
Percent absent	0.122	0.007	0.128	0.012	0.742
	(0.136)	(0.010)	(0.142)	(0.012)	
Chronic absent	0.401	0.013	0.423	0.116**	0.145
	(0.456)	(0.045)	(0.460)	(0.054)	
Transferred out of school system	0.034	-0.015	0.039	0.019	0.289
	(0.152)	(0.023)	(0.164)	(0.023)	
Observations	101,974	162,966	104,544	167,401	
Post-filing school year 1:					
Not at pre-case school	0.272	-0.013	0.283	0.160***	0.031
	(0.400)	(0.056)	(0.405)	(0.057)	
Percent absent	0.130	0.014	0.137	0.033**	0.363
	(0.151)	(0.014)	(0.157)	(0.014)	
Chronic absent	0.408	0.018	0.430	0.163***	0.053
	(0.457)	(0.049)	(0.462)	(0.056)	
Retained	0.112	0.040	0.142	0.012	0.562
	(0.291)	(0.035)	(0.322)	(0.033)	
Transferred out of school system	0.038	-0.031	0.046	0.035*	0.043
	(0.150)	(0.026)	(0.168)	(0.020)	
Observations	92,233	146,822	94,948	151,389	
Post-filing school year 2:					
Not at pre-case school	0.383	-0.030	0.404	0.170**	0.042
	(0.437)	(0.067)	(0.443)	(0.072)	
Percent absent	0.136	0.008	0.143	0.040**	0.205
	(0.160)	(0.017)	(0.165)	(0.019)	
Chronic absent	0.413	0.028	0.438	0.075	0.566
	(0.458)	(0.057)	(0.463)	(0.060)	
Retained	0.138	0.051	0.174	0.061	0.861
	(0.317)	(0.039)	(0.350)	(0.040)	
Transferred out of school system	0.040	0.032	0.047	0.026	0.840
	(0.147)	(0.023)	(0.162)	(0.021)	
Observations	80,497	128,360	83,192	132,863	

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. "Case school year" is the school year in which the case was filed and the following year for cases filed in the summer. "Post-filing school year 1" is the first complete school year after the case was filed. "Post-filing school year 2" is the second complete school year after the case was filed. "Not at pre-case school is an indicator for being enrolled at a different school relative to the school in the pre-case school year, not counting mechanical school changes due to progressing to a grade that is not available at the prior school. "Percent absent" is the proportion of days absent."Chronic absent" is an indicator for missing more than 10% of school days. "Retained" is an indicator for the grade in the given year being less than what would be implied by a normal progression since the year before the case (RY-1). "Transferred out of school system" is an indicator for if the student exited the school district and transferred to another school. All outcomes are defined among actively enrolled students, with the exception of "transferred out of school system." Columns (1)-(2) report Chicago and New York combined results for girls, (3)-(4) report combined results for boys. Combined results are constructed as described in Section 5.4. The first column reports the non-evicted mean (with standard deviations in parentheses), and the second reports the TSLS estimate for eviction. Means include standard deviations in parentheses, while TSLS estimates include standard errors in parentheses. Standard errors are clustered at the judge×case-year level. The regression and sample specifications are as described in the notes of Table 3. For each column and time period, the final row reports the average sample size across outcomes.

Table A.19: Elementary and Middle School Test Scores Test Scores by Gender (Education Sample)

	Girls		Boys		
	$\mathbb{E}[Y\|E=0]$ (1)	IV (2)	$\mathbb{E}[Y\|E=0]$ (3)	IV (4)	P-value of (2) = (4)
Case school year:					
Reading test score	-0.179	-0.004	-0.443	0.140	0.311
	(0.768)	(0.101)	(0.836)	(0.101)	
Math test score	-0.315	-0.105	-0.418	0.072	0.254
	(0.781)	(0.108)	(0.831)	(0.112)	
Missed test	0.044	0.002	0.061	0.046*	0.232
	(0.186)	(0.027)	(0.217)	(0.025)	
Observations	51,501	83,266	52,946	85,832	
Post-filing school year 1:					
Reading test score	-0.173	-0.148	-0.444	0.123	0.170
	(0.769)	(0.148)	(0.823)	(0.131)	
Math test score	-0.312	-0.001	-0.419	0.041	0.824
	(0.786)	(0.127)	(0.828)	(0.140)	
Missed test	0.098	0.052*	0.119	0.085**	0.442
	(0.279)	(0.028)	(0.302)	(0.033)	
Observations	46,761	75,467	48,201	78,047	
Post-filing school year 2:					
Reading test score	-0.167	0.185	-0.442	0.044	0.514
	(0.754)	(0.153)	(0.820)	(0.154)	
Math test score	-0.312	0.278**	-0.418	0.038	0.264
	(0.782)	(0.141)	(0.819)	(0.162)	
Missed test	0.158	0.073*	0.185	0.077**	0.952
	(0.342)	(0.044)	(0.363)	(0.039)	
Observations	42,072	68,641	42,820	70,368	

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. "Case school year" is the school year in which the case was filed and the following year for cases filed in the summer. "Post-filing school year 1" is the first complete school year after the case was filed. "Post-filing school year 2" is the second complete school year after the case was filed. "Reading test score" is the standardized test score on reading tests administered between 3rd and 8th grade (the grades with consistent mandatory testing in our sample), where scores have been standardized to have a mean of zero and standard deviation within each grade-school year for all students enrolled in that grade and school year in the district who took the test. "Math test score" is constructed similarly to the reading test score. "Missed test" is defined as an indicator that is equal to one if a student was actively enrolled in grades 3-8 but does not have one or both test scores. All outcomes are defined among actively enrolled students. Columns (1)-(2) report Chicago and New York combined results for girls, (3)-(4) report combined results for boys. Combined estimates are constructed as described in Section 5.4. The first column reports the non-evicted mean (with standard deviations in parentheses), and the second reports the TSLS estimate for eviction. Means include standard deviations in parentheses, while TSLS estimates include standard errors in parentheses. Standard errors are clustered at the judge×case-year level. The regression and sample specifications are as described in the notes of Table 3. For each column and time period, the final row reports the average sample size across outcomes.

Table A.20: High School Credit Accumulation by Gender (Education Sample)

	Girls		Boys		
	$\mathbb{E}[Y\|E=0]$ (1)	IV (2)	$\mathbb{E}[Y\|E=0]$ (3)	IV (4)	P-value of (2) = (4)
Case school year:					
Credits	0.895	-0.080	0.805	-0.151	0.750
	(0.391)	(0.071)	(0.418)	(0.210)	
Observations	24,845	36,704	23,815	35,005	
Post-filing school year 1:					
Credits	0.874	-0.099	0.788	-0.243**	0.290
	(0.402)	(0.082)	(0.427)	(0.107)	
Observations	26,804	39,226	26,176	38,191	
Post-filing school year 2:					
Credits	0.870	-0.067	0.782	-0.277**	0.205
	(0.405)	(0.104)	(0.427)	(0.130)	
Observations	25,801	37,750	25,577	37,386	

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. "Case school year" is the school year in which the case was filed and the following year for cases filed in the summer. "Post-filing school year 1" is the first complete school year after the case was filed. "Post-filing school year 2" is the second complete school year after the case was filed. "Credits" is the number of credits completed divided by the standard number of credits required to progress to the next grade in each district, which is 7 in Chicago and typically 14 in New York. "Credits" is only defined in high school, i.e. grades 9-12, and outcomes are defined among actively enrolled students. Columns (1)-(2) report Chicago and New York combined results for girls, (3)-(4) report combined results for boys. Combined estimates are constructed as described in Section 5.4. The first column reports the non-evicted mean (with standard deviations in parentheses) and the second reports the TSLS estimate for eviction. Means include standard deviations in parentheses, while TSLS estimates include standard errors in parentheses. Standard errors are clustered at the judge×case-year level. The regression and sample specifications are as described in the notes of Table 3.

Table A.21: High School Graduation by Gender (Education Sample; Filing in Grades 6 to 12)

	Girls		Boys		
	$\mathbb{E}[Y\|E=0]$ (1)	IV (2)	$\mathbb{E}[Y\|E=0]$ (3)	IV (4)	P-value of (2) = (4)
Graduation	0.729	-0.051	0.621	-0.211***	0.112
	(0.417)	(0.064)	(0.456)	(0.078)	
Graduation status not observed	0.122	0.073	0.140	0.057	0.819
	(0.294)	(0.047)	(0.310)	(0.051)	
Observations	48,846	75,638	48,429	74,706	

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. "Case school year" is the school year in which the case was filed and the following year for cases filed in the summer. "Post-filing school year 1" is the first complete school year after the case was filed. "Post-filing school year 2" is the second complete school year after the case was filed. "Graduation" is an indicator for if the student graduated conditional on seeing the student through at least age 18. "Graduation status not observed" is an indicator for if graduation status for a student who we could have seen through at least age 18 (i.e., at least age 18 by the end of our panel) is unknown, predominantly due to moving out of the district. Columns (1)-(2) report Chicago and New York combined results for girls, (3)-(4) report combined results for boys. Combined estimates are constructed as described in Section 5.4. The first column reports the non-evicted mean (with standard deviations in parentheses) and the second reports the TSLS estimate for eviction. Means include standard deviations in parentheses, while TSLS estimates include standard errors in parentheses. Standard errors are clustered at the judge×case-year level. The regression and sample specifications are as described in the notes of Table 3, except that we do not include outcome-specific lagged outcomes as controls because there is no such measure, and we additionally restrict to students in grades 6-12 during the case school year and who are at least age 18 by the end of our panel. For each column and time period, the final row reports the average sample size across outcomes.

B Data and Linkage

B.1 Court data

This subsection provides details about the Chicago and New York court record data sets. These data sets are largely the same as those used by Collinson et al. (2024), except that we observe additional years of data. In what follows, we describe the data and sample restrictions we impose.

B.1.1 Overview of the data

We use the near-universes of court records for Chicago (for the period 2000-2023) and for New York (for the period 2007-2017). For both cities, court records include the residential address of the disputed housing unit and the names of tenant(s). Other key elements we observe in the court records include case type, filing date, courtroom and date assignment, name of the landlord, attorneys' names, the amount claimed by the landlord (ad damnum amount), and whether an eviction order was granted. Below, we describe the court variables that are most relevant for our analyses.

- *Filing date* is the date the landlord filed the eviction case.
- *Tenant name(s)* are the names of the tenants listed by the landlord when filing the case. Names are cleaned to standardize case and punctuation.
- *Case address* is the property address provided by the landlord when filing the case. In Chicago, addresses are standardized using the SmartyStreet address standardization API. In New York, addresses are standardized using HUD's Geocoding Service Center, which uses Pitney and Bowes' Core-1 Plus address-standardizing software.
- *District* is the district in which the case is filed. Both Cook County and New York divide their regions into multiple court districts, each with their own court house and eviction courtrooms. Landlords cannot choose the district in which they file their case and are required to file eviction cases in the district in which the property is located.
- *Judge* is the judge that is assigned to the case. In both Chicago and New York, cases are randomly assigned to a courtroom and time slot. Since judges are designated to specific courtrooms, the randomization to courtroom and time effectively randomizes judge assignment. In Chicago, our data includes the identity of the judge overseeing that courtroom at the date and time of the case. In New York, we do not observe the identity of the judge assigned to the case and instead use the term 'judge' to refer to the

courtroom assigned to the case. We use the judge or courtroom assigned at the time of filing, regardless of any subsequent changes in judge assignment.

- *Eviction* is an indicator for the case ending in eviction. We construct this using docket entries indicating either an order for possession or a ruling in favor of the plaintiff (landlord). See Collinson et al. (2024) for more details.
- *Has attorney* is an indicator for the tenant being represented by an attorney.
- *Case type* describes whether the landlord is only seeking possession of the property (single action in Chicago, holdover in New York) or whether the landlord is seeking payment of rental arrears in addition to possession of the property (joint action in Chicago, nonpayment in New York).
- *Ad damnum* is the amount of money the plaintiff (landlord) is seeking in payment of rental arrears upon filing joint action in Chicago or nonpayment in New York. We windsorize any amounts greater than $100,000, as these may partially reflect entry errors and extreme outliers.

B.1.2 Baseline sample restrictions

The following restrictions mirror the restrictions imposed by Collinson et al. (2024).

Chicago. The full sample consists of 675,747 cases. We impose a few baseline restrictions. First, we impose that the defendant is not a business and the property is not a condo. We drop businesses because we are interested in the impacts of eviction on residential tenants. We drop condos as they typically represent the eviction of condo owners, rather than renters. Second, we drop cases with missing names or only "unknown occupants," as we are not able to link these cases to our other samples. Third, we drop the rare cases with more than $100,000 in damages, as there is a small right tail involving very large damages, which we believe are a combination of entry errors and outlier cases. Lastly, we drop cases for which we cannot determine whether the case ends with eviction or not (see Collinson et al. (2024) for details). These restrictions result in a sample of 600,914 cases, which corresponds to our baseline sample prior to linking.

New York. The full sample consists of 1,192,988 calendared cases. We impose a few baseline restrictions, outlined in (Collinson et al., 2024) and described below. First, we restrict the sample to cases involving residential property, excluding businesses because we are interested in the impacts of eviction on residential tenants. We also drop cases involving condos or co-ops, as these are not randomly assigned to courtrooms. We use annual administrative data from the New York City Department of Finance to identify buildings with condos or co-ops. Second, we drop cases with missing names, as we are not able to link these cases to our other samples. Finally, we drop cases involving the public housing authority (NYCHA) because these are not randomly-assigned to courtrooms These restrictions result in a sample of 774,464 cases, which corresponds to our baseline sample prior to linking.

B.2 Education data

This subsection provides details about Chicago and New York education data. We describe the data, their linkage to court records, and the sample restrictions we impose. We then discuss variable construction and the time indexing of the data.

B.2.1 Overview of the data

The calendar year can be divided into the academic term, which includes the fall and spring seasons, and the summer. In both Chicago and New York, the academic term has typically run from early September to late June, so we use September 1 to June 30 to define the academic term and July 1 to August 31 to define summer. We index the school year based on the year of the spring term, with the previous summer also belonging to that school year. For example, the 2009 school year includes the summer of 2008 and concludes with the spring term of 2009.

Chicago. We use administrative schooling records from Chicago Public Schools (CPS). The data contains student-year level records from 2000-2019, for grades K-12. As we discuss below, we only observe address data for student-year records in the 2003-2019 calendar years, which corresponds to records for 1,246,650 unique students. We can only link these students to eviction records.

New York. We use administrative schooling records from New York City's Department of Education (NYCDOE). The NYCDOE contains student-year level records from 2005-2018, for grades K-12. We observe panel data for 2,859,983 unique students.

B.2.2 Linkage and sample restrictions

Chicago. The link between the baseline sample of court records and student records was conducted by Chapin Hall based on names and addresses from both data sets. The baseline sample of court records contains the names of the tenants on the case, the case address, and the case filing date. CPS records contain, for each school year and season in the 2003-2019 calendar years, the names of enrolled students, their residential address, and the names of any parents or guardians. Prior to linkage, the following steps were implemented:

- Names and addresses from CPS were cleaned and standardized following similar procedures to those implemented for court records. When a record had multiple first or last names, multiple aliased records were created with each name.
- All string fields were converted to uppercase, and soundex codes were calculated for fields representing student last name, guardian first name, guardian last name, street name, and city name.

BigMatch software and human supervision were jointly used to define a match as any permutation of CPS and Court records where all the following were satisfied:

- The date of the CPS address record was between 120 and 0 days prior to the court filing data;
- House number, street number, direction, address, suffix, and city showed acceptable agreement based on fuzzy matching and human supervision for setting weights and cutoffs on linkage metrics; and
- Either (i) guardian name matched Court defendant name in soundex or (ii) for the subset of years when unit numbers were captured in CPS data, student last name matched the defendant's and the address either included no unit number or, if it did, it matched the unit from the Court record.

Given these matches, we de-duplicate student-case pairs that arise when a student is linked to more than one defendant in the same case (but we keep observations of children linked to more than one case).

This linkage results in 77,256 unique student-case matches, comprised of 58,650 unique students and 46,530 unique cases. We use this linked sample for our analysis of trends around an eviction case filing. The 46,530 unique linked cases are part of the 488,761 unique cases from our baseline court data that were filed between the 2003-2019 calendar years (and thus are eligible to be potentially linked to CPS data). The implied linkage rate of 9.5% is likely substantially below the share of families who face an eviction filing, in part because we require that the children attend CPS schools in the months prior to the eviction filing. This rate is also likely an under-estimate of the share of families with children in CPS who face eviction filing due to our strict matching criteria that were designed to increase the chances of avoiding measurement error.

For our IV/OLS analyses, we impose two additional restrictions similar to those imposed by Collinson et al. (2024). First, we impose that a single judge can be clearly identified from the randomly assigned room and time, and that the district had at least two active judges seeing cases during the week of the initial hearing. These restrictions help guarantee that we can identify the judge and that there was more than one judge to whom the case could have been assigned. Second, we impose that the assigned judge saw at least 100 cases that year, which ensures that the judge sees a sufficient number of cases to accurately estimate stringency. These reductions results in 74,733 unique student-case matches, comprised of 56,999 unique students and 44,998 unique cases. We use this sample in our IV/OLS analyses.

Because the linkage is based on address information prior to the case filing date, it should not be correlated with the randomly assigned judge. To examine this possibility, Table B.1 reports the estimates of regressions of the indicator for the case being linked to a student separately on eviction status and on the instrument. All regressions include judge×year fixed effects, and we consider specifications both with and without the court controls included in our IV/OLS results (indicator for the tenant being without an attorney and the ad damnum amount). In both specifications, the coefficient on the stringency instrument is statistically insignificant.

Table B.1: Linked to CPS records

	(1)	(2)	(3)	(4)
Evicted	0.0010	0.0018		
	(0.0013)	(0.0013)		
Stringency			0.0242	0.0242
			(0.0223)	(0.0222)
No attorney		-0.0263^{***}		-0.0261^{***}
		(0.0035)		(0.0035)
Ad Damnum		-0.0020^{***}		-0.0020^{***}
		(0.0001)		(0.0001)
Court controls	No	Yes	No	Yes
Observations	431,044	431,044	431,044	431,044

Notes: $^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$. Court records are restricted to the analysis samples used in our IV/OLS regressions that were eligible to be linked to CPS records (i.e., filed in the 2003-2019 calendar years). All regressions include district-year fixed effects. Standard errors are clustered at the judge-year level.

New York. The link between the baseline sample of court records and student records was conducted with the help of the Center for Innovation through Data Intelligence (CIDI) working on premise at the DOE using names and addresses from both data sets. The baseline sample of court records contains the names of the tenants on the case, the case address, and the case filing date. The K-12 records contain, for each school year from 2005-2017, the names of enrolled students, their residential address, and the names of any parents or guardians. Prior to linkage, the following steps were implemented:

- Names from DOE records were cleaned and standardized to remove non-numeric characters

- Addresses were geocoded to the building level and assigned a building identification number using the NYC Geobat geocoding tool
- A soundex transformation of last names was created for blocking in the record linking procedure

The record linkage then proceeded in the following manner:

- In the first step, tenants from the court records were exact matched on building identification number and soundex of the last name to the school records
- In the second step, all matches with move-in dates *after* the eviction filing were discarded
- In the third step, Jaro-Winkler string distances were calculated between names in the court and school records; and only records with first name and last name scores exceeding 0.87 were retained as a tenant matches
- In the final step, any student who was discharged from the district *before* the filing date was discarded

As in Collinson et al. (2024), we apply three sample restrictions for our IV/OLS analysis. First, we drop cases arising in courts with only one judge (Staten Island) or in one of two specialized courts in Red Hook and Harlem, since we cannot construct the instrument for these cases. Second, we drop cases where the courtroom (and hence the judge) are not randomly assigned. These include cases involving the public housing authority, cases assigned based on zip code through several policy initiatives, and cases involving drugs or members/family members of the active military. Third, we require that the courtroom hears at least 500 total cases in a year, which results in a very small number of cases being dropped. Functionally, this restriction drops courtrooms that are used only sporadically, which may feature non-random set of cases.

After applying sample restrictions, the resulting linked sample consists of 278,879 unique student-case matches, comprised of 206,789 unique students and 185,509 unique cases. We use this linked sample for all of our analysis.

To examine whether linkage is correlated with the instrument, Table B.1 reports the estimates of regressions of the indicator for the case being linked to a student separately on eviction status and on the instrument. All regressions include district-year fixed effects, and we consider specifications with and without the court controls included in our IV/OLS results (indicator for the tenant being without an attorney and the ad damnum amount). In both specifications, the coefficient on the instrument is statistically insignificant.

Table B.2: Linked to DOE records

	(1)	(2)	(3)	(4)
Evicted	-0.017	-0.018		
	(0.0015)	(0.0015)		
Stringency			-0.025	-0.024
			(0.018)	(0.018)
No Attorney		0.090		0.088
		(0.0066)		(0.0066)
Ad Damnum		-1.5e-06		-2.5e-06
		(6.8e-06)		(6.3e-06)
Observations	774,464	774,451	774,464	774,451

Notes: $^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$. Court records are restricted to the analysis samples used in our IV/OLS regressions. All regressions include district-year fixed effects. Standard errors are clustered at the judge-year level.

B.2.3 Variable construction and time indexing

Since most outcomes in the schooling data are defined annually over the entire academic year, while evictions filings occur throughout the calendar year, we need to map school outcomes into years relative to eviction filing. We index results to the school year and take relative year 0 (RY0) as the school year in which the case is filed. If the case is filed in the summer, RY0 is the academic year that starts that fall. For homelessness outcomes derived from HMIS records, we know the specific dates the outcome occurs, so we define RY0 as the first 365 days after the case filing. Lagged relative years (i.e., RY-1, RY-2, etc.) and lead relative years (i.e., RY1, RY2, etc.) are defined relative to RY0.

We use the panel data to construct variables in different ways based on the nature of the data. First, we define time-invariant characteristics, such as gender and race. We then construct time-variant variables. Lastly, to define high school completion variables, we consider the last observed status given our panel data. We now discuss the construction of variables in more detail.

Time-invariant characteristics. These variables are observed for all students in our linked sample (see Appendix Table B.3 for years of availability of this data by city). We consider the following variables:

- *Gender* is an indicator for the student's reported gender being female.
- *Race and ethnicity* are the reported race and ethnicity of the student. For Chicago it takes one of the following values: Black, Hispanic, White, or other[38]. Similarly, for New

[38]This is constructed from a single field collected by CPS that captures the following mutually exclusive race/ethnic categories: Black/African American, Hispanic, White, Asian, Native American/Alaskan, Hawaiian/Pacific Islander, and Multi-Racial.

York, race and ethnicity are consolidated, but may also take the value "Asian" or "Native American."

- *Free or reduced lunch* for Chicago and New York is an indicator for the student qualifying for free or reduced lunch in a school year prior to the one that contains the case filing date.[39]
- *Individualized Education Program (IEP) and disability status* takes values for overall IEP status and for corresponding learning accommodations. In Chicago, IEP codes are used to distinguish students with speech-related accommodations, emotional or behavioral disorders, or other learning considerations such as dyslexia or autism. For New York, we consider an indicator for IEP, and indicators for the following disability statuses: learning disability, emotional disability, and speech impediment.
- *Language status* is observed for New York and is used to construct indicators for Spanish-speaking and for other-language-speaking.
- *Born in New York City* is observed for New York and is an indicator for being born in New York City.

Time-varying variables. All time-varying variables—except for homelessness outcomes derived from HMIS records (and transferring out for New York)—are defined over the academic term. Because the indexing depends on whether a case occurs during the academic term (the fall and spring seasons) or during the summer, we discuss each separately. To capture the potential for eviction to have an immediate impact on students, we focus on cases filed during the academic term and define relative (school) year 0 (RY0) as the school year during which the case is filed. Lagged relative years (i.e., RY-1, RY-2, etc.) and lead relative years (i.e., RY1, RY2, etc.) are defined relative to RY0. In this way, RY1 is the first full academic term after an eviction filing. For instance, a case filed in the fall of 2010 or the spring of 2011 occurs during the 2011 school year, and thus RY-1 is 2010, RY0 is 2011, and RY1 is 2012.

For cases filed during the summer, we define RY0 as the school year with the academic term that begins right after the summer. Lagged relative years (i.e., RY-1,RY-2,etc.) and lead relative years (i.e., RY1, RY2, etc.) are defined relative to RY0. For instance, consider a case filed in the summer of 2011. Such a case occurs during the 2012 school year, and thus RY-1 is 2011 (the school year that ended before the case filing), RY0 is 2012 (the school year that begins after the case filing), and RY1 is 2013.

For homelessness outcomes derived from HMIS records (and transferring out for New York), we know the specific dates the outcome occurs, so we define RY0 as the first 365 days after

[39]For precise definitions of school years relative to the case filing date, see the next paragraph on school year indexing.

the case filing. Lagged relative years (i.e., RY-1, RY-2, etc.) and lead relative years (i.e., RY1, RY2, etc.) are defined relative to RY0.

We use this indexing to define the following variables for relative year t (RYt) where, unless specified otherwise, we implicitly condition on the student being enrolled in RYt (see Appendix Table B.3 for years of availability of the below variables):

Based on characteristics data:

- *Age (in RYt)* is the age in RYt, and is known irrespective of enrollment at t.

Based on enrollment data:

- *Grade (in RYt)* is the grade (K-12) in RYt.
- *Predicted grade in RYt* is the grade in RYt implied by a normal progression from their grade in RY-1. This is equal to the grade in RY-1 plus (t+1).
- *Not at pre-case school (in RYt)* is an indicator that is one if the school identifier in RY-1 is different from the school identifier in RYt, not counting mechanical school changes due to progressing to a grade that is not available at the prior school.
- *Number of school changes (in RYt)* is the sum of year-on-year school changes starting from RY-1 and ending with RYt, where a school change is defined as in the previous bullet. Thus, not at pre-case school in RY0 and number of school changes in RY0 are equal.
- *Transferred out of school system (in RYt)* is an indicator that is one if the student is marked as having transferred out of the school system in RYt. This variable does not condition on being enrolled in RYt.

Based on address data:

- *Not at pre-case address (in RYt)* for Chicago is an indicator that is one if the distance between the latitude and longitude coordinates in RY-1 and RYt exceeds a minimum threshold, which we set to 100m and which is not sensitive to the choice of threshold.[40] We consider the address measured in the spring season of the school year. For New York, it is an indicator that is one if the census block in RY-1 is different from the census block in RYt. The addresses are recorded in June of he respective school year.
- *Number of moves (in RYt)* is the sum of year-on-year address changes starting from RY-1 and ending with RYt, where an address change is defined as in the previous bullet. Thus, not at pre-case address in RY0 and number of moves in RY0 are equal.

[40]Chapin Hall used actual address data when conducting the link between court records and CPS student records, but this data is not available for subsequent use.

- *Neighborhood poverty (in RYt)* for Chicago is the tract-level percent of households below the federal poverty line obtained from American Community Survey (ACS) 5-year aggregates. Because each estimate spans 5 years, we match each school year with the 5-year estimate for which it is the midpoint. For instance, if RYt has school year 2014, we pull the poverty rate from the 2012-2016 5-year ACS.[41] For New York, we rely on ACS 5-year estimates for the period 2006-2010.

Based on McKinney-Vento data:

- *McKinney Vento (in RYt)* for Chicago is a flag that comes from two sources. First, a binary indicator of homelessness is available in the student "master file" records. Second, starting in school year 2016, data is available from the Students in Temporary Living Situations (STLS) program, which includes both a binary indicator of student status as well as additional information on temporary living arrangements (such as homeless shelter or being doubled-up) and whether the student is accompanied by an adult. McKinney-Vento data is not observed for New York.

Based on HMIS data:

- *Homelessness (in RYt)* for New York is an indicator for the student child being listed on a family application for shelter bed as recorded by the Department of Homeless Services. HMIS data is not linked to CPS data, and is thus not directly observed for Chicago. However, as described in Appendix B.3, we do measure it for a different sample of children.

Based on school attendance data:

- *Percent absent (in RYt)* is the number of days absent in RYt divided by the number of school days in RYt in which the student was enrolled in the district.
- *Chronically absent (in RYt)* is an indicator that is one if percent absent in RYt is greater than or equal to 10%, which is the threshold used by the Department of Education to measure chronic absenteeism (see, for example, Chicago Public Schools 2022, New York State Education Department 2025, or U.S. Department of Education 2025).
- *Retained (in RYt)* is an indicator of whether the grade in RYt is less than the predicted grade based on RY-1, i.e. less than what would be implied by a normal progression given the grade in RY-1. In addition to requiring that a student is enrolled in RYt, we also require that the student's grade implied by a normal progression from their grade in RY-1 lies within grades 1-12. This requirement helps avoid issues arising from students who

[41] For school years that do not have corresponding ACS data from this strategy, we use the most recently-available ACS data at the time of writing. For instance, for school year 2021, we used ACS 5-year data from 2017-2021.

graduate leaving the sample while those who are retained remaining, creating a sample selection issue that obfuscates the interpretation of this variable.

Based on test scores data: Standardized state reading/English and Language Arts (ELA) and math tests are administered in grades 3-8 for both Chicago and New York.[42] In both cities, tests are required to be completed over certain time windows of the year.

For Chicago, the different standardized test regimes that span the panel are the Illinois Standards Achievement Test (ISAT), Partnership for Assessment of Readiness for College and Careers (PARCC), and the Illinois Assessment of Readiness (IAR), and their testing windows are determined by CPS administration of Illinois State Board of Education guidance.[43] For New York, all standardized test scores come from the New York State Assessment. Since 2005-06, the New York State Education Department applies the ELA and mathematics testing programs to Grades 3-8. Previously, state tests were administered in Grades 4 and 8 and citywide tests were administered in Grades 3, 5, 6, and 7.

In both cities, students are assessed with both math and reading test, and the "scale score" values are used in our analysis. We define math and reading test scores in RYt to be the tests that occur in the academic term corresponding to RYt. Given these test scores, we define the following variables:

- *Reading (math) test score (in RYt)* is the reading (math) test score in RYt as described above. To aid with comparability across cities and with interpretability, we separately Z-score the reading and math scores over their test score distributions for all students in the school system in the considered grade×school-year.
- *Missed test (in RYt)* is an indicator for whether a student is missing a math test score or a reading test score. This sample conditions on students who are enrolled in grades 3-8 in RYt and thus is defined as missing a test score when the student was expected to take the test.
- *Average achievement of school attended (in RYt)* for Chicago is the average of math and reading test scores taken over all students – irrespective of being linked to eviction records – in the considered student's school in the school year given by RYt. For instance, for a student with RYt corresponding to the school year 2011, it is the school-specific average of all test scores from school year 2011. As test scores are for grades 3-8, we do not have measures for schools that do not include these grades.

[42] While other tests–including those for college admissions such as the SAT, or other formative assessments–are tested in these and other grades, we do not include them in the analysis because they are less consistently assessed, and do not have the same higher stakes as these Federally-required standardized tests in grades 3-8.

[43] ISBE, 2023. *Assessment Communications.* https://www.isbe.net/Pages/Assessment-Communications.aspx.

Based on credits data:

- *Credits (in RYt)* is the number of completed credits in RYt divided by the standard number of credits required to progress to the next grade. This normalization is done to make the Chicago and New York results comparable. We implement this by dividing the number of completed credits by the modal number of completed credits in the student's grade (computed using all students in the school system in the considered grade). In Chicago, this standard number of credits required to progress to the next grade is always 7. In New York, this number is typically 14. Credits are observed for grades 9-12 in Chicago and for grades 7-12 in New York. To ensure comparability across cities, we restrict New York credits data to grades 9-12.

Based on GPA data:

- *GPA (in RYt)* for Chicago is the average (unweighted) GPA over the academic year of RYt. GPA is measured on a four-point scale and for grades 9-12. It is not observed for New York.

High school completion measures We measure high school completion by using the last observed enrollment status of high school students as recorded in our panels. This final observed enrollment status for a high school student can take one of the following values: still enrolled, dropped out, graduated, or transferred out of the school system. Because we do not observe whether a student who transfers out is still enrolled in another school, dropped out, or graduated from a school outside the district, we restrict attention to the sample of students who are enrolled in high school at some point in the panel and do not transfer out of the system (see Appendix D for details on the bounding approach we use to address transfers and attrition). Lastly, to focus on students who are expected to graduate by the end of our panels, we additionally condition on students who are at least 18 years old by the end of our panels. We define the following outcomes:

- *Graduation* is an indicator that is one for students whose final status is recorded as graduated. The sample is as described above.
- *Graduation status not observed* is an indicator for being in the sample described above among those who are age 18 or older by the end of our panels.
- *Dropped out* is an indicator that is one for students whose final status is recorded as dropped out. The sample is as described above.
- *Graduated on time* is an indicator that is one for students who graduate within four years of first entering 9th grade, and zero otherwise. The sample is as described above and

additionally restricts to students who are actively enrolled in 9th grade at some point in our panels.

Table B.3: Data sources and availability

	Chicago			New York		
	Has?	Grades	School years	Has?	Grades	School years
Characteristics data	Yes	K-12	2000-2019	Yes	K-12	2005-2018
Enrollment data	Yes	K-12	2000-2019	Yes	K-12	2005-2018
Address data	Yes	K-12	2004-2019	Yes	K-12	2007-2017
McKinney-Vento data	Yes	K-12	2009-2019	No	-	-
HMIS data	No†	-	-	Yes	-	2003-2019
Attendance data	Yes	K-12	2009-2019	Yes	K-12	2005-2018
Credits data	Yes	9-12	2015-2019	Yes	6-12	2008-2017
GPA data	Yes	9-12	2009-2019	No	-	-
Test scores data	Yes	3-8	2000-2019	Yes	3-8	2006-2017

Notes: School years are indexed by the year of the spring season of the academic term. The † indicates that although HMIS results are not available for the Chicago education sample (since HMIS records are not linked to this sample), these results are available for the Chicago Census sample.

B.3 Census data

This subsection provides details about how the Census samples are constructed and how the key variables are defined.

B.3.1 Overview of the data

We use linked Census data for three main purposes: (1) to characterize what proportion of households facing eviction have children (Section 4.1); (2) to estimate staggered event studies and present trends of household and neighborhood outcomes (Section 4.4); (3) to study the impact of eviction on Census household and neighborhood outcomes (Section 6.1); and (4) to estimate event studies and study the impact of eviction on child homelessness, using linked HMIS data (Sections 4.4 and 6.1).

B.3.2 Linkage and sample restrictions

All Census samples begin with the processing of Cook County eviction court records. The Census Bureau has applied its Person Identification Validation System (PVS) to the names and addresses of tenants in eviction court records. This procedure uses probabilistic matching to assign a unique anonymized identifier to individuals called a protected identification key (PIK), which we use to link to other Census datasets.

To construct the samples used to characterize the proportion of households with children (used in Section 4.1), we take the PIK'd court records and link them to the 2010 Decennial, and, separately, to the 2000 Decennial. Because the goal is to consider children in the household at the time of filing, we restrict the sample to cases occurring between 2000-2004 for the 2000 Decennial linkage, and to cases occurring between 2008-2012 for the 2010 Decennial linkage. We restrict the linkage to tenants who are not in group quarters, so that children in the household can be observed, and also to one case per tenant-year to not overweight tenants with multiple cases per year. And we also restrict to one tenant per case in cases with multiple tenants, using different rules for selecting the tenant: (i) randomly selecting one tenant, (ii) selecting the Census household head, (iii) choosing the female tenant first, and if there are more than one female tenant choosing the tenant at random. We then present the proportion of households with children aged 0-18, and the number of children per household among those with at least 1 child. Table B.4 presents additional information on the construction of the linked Census sample. We link approximately 68 percent of our Decennial 2000 child sample to their 2010 Decennial records. In the same table, we also show that judge stringency is not predictive of the tenant linking to the 2000 Decennial and that for the sample of children in tenants' households in the 2000 Decennial, judge stringency is not predictive of linking to a 2010 Decennial record.

To construct the Census event study sample (used in Section 4.4), excluding the HMIS analysis, we link the PIK'd tenant-case records at the individual level to tenants' 2010 Decennial records. We use case years between 2007 and 2015 to study children beginning 3 years prior to and continuing until 5 years after the 2010 Decennial. We restrict to tenants who are not in group quarters in the 2010 Decennial, because the household relationship variable is missing for those in group quarters.[44] Next, we construct a child-case level dataset using any children in the tenant's household aged 0-18 regardless of their relationship to the tenant.[45]

To construct the IV/OLS Census sample (used in Section 6.1) for all household and neighborhood outcomes excluding the HMIS analysis, we link tenants in PIK'd court records at the individual level to their 2000 Decennial records. We restrict the sample to tenants with case filings between 2000 and 2009 so that the 2000 Decennial precedes the court case and the 2010 Decennial follows the court case. We restrict tenants to those not in group quarters. We then collect all the PIKs of children in these households. We restrict children to those who are 18 or under as of the case year, and 18 or under as of the Decennial 2010. The purpose of this restriction is to

[44]Panel B of Appendix Figure A.4 uses the tenant-level linkage and shows an event study depicting the proportion of tenants in group quarters by year relative to filing. This figure shows that evicted tenants are about 1 percentage point more likely to be in group quarters in the 1-5 years after eviction filing.

[45]Note that if there are multiple tenants on the court case and they are not living together as of the 2010 Decennial, we will include any child living in either household as of the 2010 Decennial in our analysis sample. Note that if there are multiple tenants on the court case and they *are* living together as of the 2010 Decennial, we include each child only once in the analysis dataset.

study the impact of eviction on children who are still children as of the outcome period. We make a few other minor sample restrictions: (1) requiring an age discrepancy of no more than 1 year between the child's age in the 2000 Decennial plus 10 years, and the child's age in the 2010 Decennial; (2) requiring at least one of the linked tenants in the household to be over 18 as of the case year; and (3) the court case restrictions in described in Section 3 such as dropping bulk filings, cases in which landlords are claiming over $100,000, etc. The analysis sample is a child-case dataset. The household relationship outcomes (i.e., doubling up, multigenerational household, mother/father present, etc.) are missing for children in group quarters as of the 2010 Decennial, while the neighborhood outcomes (neighborhood poverty rate, out-of-county indicator, out-of-state indicator) are measured regardless of whether the child is living in group quarters.[46]

To construct the Cook County child-HMIS sample, we begin with the PIK'd tenants, linked to the 2010 Decennial, and to the 2000 Decennial. We collect the PIKs of all children in the household and avoid double counting children in both linkages. We restrict the sample of children to those who are the child of the household head, because when we link to the HMIS data we will restrict the HMIS data to children who are the child of the household head. We restrict to case years between 2010 and 2016 (inclusive), to overlap with the HMIS sample years, and we restrict to children who are 18 or under as of the Decennial year, the HMIS year, and the case year.

B.3.3 Variable construction and time indexing

We now provide detailed definitions for the household and neighborhood outcomes in the 2010 Decennial:

- *Single mother.* Takes a value of one if the reference child is the child of a female household head and there is no spouse present.
- *Single mother (without cohabiting partner).* Takes a value of one if the reference child is the child of a female household head and there is no spouse present and there is no cohabiting partner present.
- *Single father.* Takes a value of one if the reference child is the child of a male household head and there is no spouse present.
- *Single father (without cohabiting partner).* Takes a value of one if the reference child is the

[46]Only 1.4 percent of the non-evicted group are in group quarters in 2010, and there is no statistically significant impact of being evicted on the likelihood of being in group quarters: our main IV specification produces an insignificant point estimate of -1.2 percentage points, and our main OLS specification produces an insignificant point estimate of 0.1 percentage point, as shown in Table B.5.

Table B.4: Decennial Census Linkage Details

A. Match rates and baseline relationships	Mean			
Match rate (tenant): Court records to Decennial 2000	0.67			
Match rate (child): Decennial 2000 to Decennial 2010	0.68			
Child linked through:				
Mother	0.62			
Father	0.19			
Grandparent	0.07			
Aunt or Uncle	0.02			
Sibling	0.08			
B. Eviction and match rates	Matched to 2000		Matched to 2010	
	(1)	(2)	(3)	(4)
Eviction	-0.033***		-0.006	
	(0.003)		(0.004)	
Stringency		-0.039		-0.122
		(0.046)		(0.106)
Observations	203,000	187,000	78,000	72,000

Notes: Panel A. provides summary statistics of the data linkage procedure that creates the Census sample. We present the overall match rate of the tenant sample to the Decennial 2000 court records, and the match rate of the children in the Decennial 2000 to the Decennial 2010. We also provide the proportion of the child sample linked through each relative. Panel B. estimates a regression of an indicator of the tenant matching to the Decennial 2000 records on the eviction indicator (column 1) and on the stringency measure (column 2). We then use the sample of children in the Decennial 2000 and regress an indicator for those children linking to the Decennial 2010, on eviction (column 3) and on stringency (column 4). Approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-P2476-R10965.

Table B.5: Group Quarters (Census Sample)

	$\mathbb{E}[Y\|E=0]$	OLS	IV
	(1)	(2)	(3)
Group Quarters	0.014	0.001	-0.012
		(0.001)	(0.019)
Observations	18,000	53,000	49,000

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. This table reports results for the Census sample (Cook County) of OLS and two-stage least squares (IV) regressions to estimate the impact of being evicted on the likelihood of being in group quarters. The first column reports the non-evicted mean, the second reports the coefficient on an eviction indicator from an OLS regression, and the third reports the TSLS estimate for eviction. The regression and sample specifications are as described in the notes of Table 4. Approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-P2476-R11514.

child of a male household head and there is no spouse present and there is no cohabiting partner present.

- *Multigenerational household.* Takes a value of one if any of the conditions are met: (i) the reference child is the child of the household head and the household head has a parent, parent-in-law, or grandparent present, (ii) the reference child is the grandchild of the household head and a child (biological, adopted, or step), parent, or parent-in-law of the household head is present.
- *Doubling-up (including grandparents).* Takes a value of one if there is any adult (19 and older) in the household that is not the child, spouse, or cohabiting partner of the household head.

- *Doubling-up (excluding grandparents).* This measure excludes parents or parents-in-law of the household head.
- *Mother present.* This measure takes a value of one if (i) the reference child is the child of a female household head, (ii) the reference child is the child of a male household head and the female spouse is present (note this would include step-mothers), (iii) the reference child is the grandchild of the household head and the female child of the household head is present (note this condition may erroneously include aunts), (iv) the reference child is the brother or sister of the household head and the female parent of the household head is present (note this may include step-mothers).
- *Father present.* This measure is analogous to *mother present.*
- *Out of county.* An indicator equal to 1 if the child is living outside of Cook County, IL.
- *Out of state.* An indicator equal to 1 if the child is living outside of Illinois.

In the linked Census-HMIS data, we define event time in months relative to the case month, so year 0 refers to an HMIS outcome between 12 months prior and 1 month prior to the case month, year 1 refers to an HMIS outcome between the case month and 11 months after the case, year 2 refers to an HMIS outcome between 12 months after the case and 23 months after the case, etc. The homelessness outcome in the HMIS sample refers to any interaction with the homelessness system.

C Specification Details and Robustness

This appendix presents robustness results to our main specification. Tables C.1-C.4 present IV results for our education samples under two different specifications in addition to our main specification. In the first specification ('No X'), we include no controls (but keep the fixed effects). In the second specification ('Base X'), we include court and education covariates, but no lagged controls. Apart from these differences in how we incorporate covariates, these specifications are like our main specification described in Section 5. The third specification ('Main IV') is our main specification that we include for ease of comparison.[47] Overall, we find that both the estimates and standard errors across all three specifications are quite similar.

Table C.5 presents IV results for our Chicago Census sample under a 'No X' specification that includes no controls (but keeps the fixed effects). Apart from this difference, this specification is like our main specification described in Section 5. The second specification ('Main IV') is our main specification that we include for ease of comparison. We again find that the estimates and standard errors across both specifications are quite similar.

Lastly, Tables C.1-C.5 also present reduced form estimates under our main specification ('Main RF'). These estimates are similar to our IV estimates, consistent with our first stage being close to unity.

[47]Because high school completion variables have no notion of lagged outcomes, the main and 'Base X' specifications are equal, and we thus omit presenting both.

Table C.1: Robustness to Controls and RF: Home environment (Education Sample)

	Chicago				New York				Combined			
	No X IV	Base X IV	Main IV	Main RF	No X IV	Base X IV	Main IV	Main RF	No X IV	Base X IV	Main IV	Main RF
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Case school year:												
Not at pre-case address	0.303***	0.298***	0.299***	0.346***	0.081**	0.077**	0.087**	0.073**	0.121***	0.117***	0.125***	0.122***
	(0.102)	(0.100)	(0.099)	(0.112)	(0.036)	(0.037)	(0.037)	(0.032)	(0.034)	(0.035)	(0.035)	(0.033)
Neighborhood poverty	-0.017	0.006	0.006	0.006	0.008	0.009	0.009	0.008	0.002	0.008	0.009	0.007
	(0.034)	(0.032)	(0.032)	(0.035)	(0.014)	(0.014)	(0.014)	(0.011)	(0.013)	(0.013)	(0.013)	(0.011)
Homelessness†	0.067**		0.070**	0.060**	0.023	0.024	0.031	0.026	0.026		0.033*	0.028*
	(0.032)		(0.033)	(0.027)	(0.021)	(0.021)	(0.020)	(0.017)	(0.019)		(0.019)	(0.016)
McKinney Vento	0.108	0.115	0.079	0.081								
	(0.077)	(0.074)	(0.070)	(0.073)								
Observations	42,276	49,868	41,276	42,276	238,610	238,610	238,610	238,610	280,408	272,758	279,075	280,408
Post-filing school year 1:												
Not at pre-case address	0.148	0.142	0.141	0.175	0.126**	0.121**	0.135**	0.111**	0.130***	0.125***	0.136***	0.123***
	(0.095)	(0.095)	(0.095)	(0.119)	(0.052)	(0.053)	(0.053)	(0.046)	(0.046)	(0.047)	(0.047)	(0.044)
Number of moves	0.109	0.097	0.097	0.118	0.218**	0.208**	0.233**	0.192**	0.199**	0.189**	0.210**	0.179**
	(0.174)	(0.172)	(0.172)	(0.210)	(0.089)	(0.091)	(0.092)	(0.078)	(0.079)	(0.081)	(0.082)	(0.074)
Neighborhood poverty	-0.023	-0.007	-0.007	-0.008	0.024	0.024	0.024	0.019	0.014	0.017	0.018	0.013
	(0.026)	(0.024)	(0.024)	(0.027)	(0.017)	(0.017)	(0.017)	(0.013)	(0.015)	(0.014)	(0.014)	(0.012)
Homelessness†	0.077**		0.077**	0.060***	0.043	0.045*	0.051**	0.041**	0.046*		0.053**	0.042**
	(0.031)		(0.033)	(0.022)	(0.027)	(0.027)	(0.026)	(0.021)	(0.025)		(0.024)	(0.019)
McKinney Vento	0.131	0.144*	0.103	0.107								
	(0.081)	(0.075)	(0.075)	(0.079)								
Observations	37,825	42,407	37,825	37,825	193,622	193,622	193,622	193,622	229,186	214,124	229,186	229,186
Post-filing school year 2:												
Not at pre-case address	0.145	0.138	0.126	0.163	0.171**	0.170**	0.186**	0.140**	0.166***	0.164***	0.174***	0.144***
	(0.094)	(0.091)	(0.090)	(0.117)	(0.074)	(0.076)	(0.078)	(0.059)	(0.063)	(0.063)	(0.065)	(0.053)
Number of moves	0.197	0.179	0.179	0.231	0.410**	0.404**	0.448**	0.337**	0.376**	0.368**	0.405**	0.320**
	(0.210)	(0.199)	(0.199)	(0.258)	(0.181)	(0.183)	(0.190)	(0.147)	(0.156)	(0.157)	(0.163)	(0.130)
Neighborhood poverty	-0.014	-0.011	-0.011	-0.014	0.031	0.027	0.028	0.020	0.020	0.018	0.019	0.013
	(0.029)	(0.025)	(0.025)	(0.031)	(0.021)	(0.021)	(0.021)	(0.015)	(0.018)	(0.017)	(0.017)	(0.014)
Homelessness†					0.003	0.006	0.012	0.009				
					(0.029)	(0.029)	(0.029)	(0.022)				
McKinney Vento	0.101	0.115	0.078	0.082								
	(0.088)	(0.083)	(0.080)	(0.084)								
Observations	36,709	36,709	36,709	36,709	156,814	156,814	156,814	156,814	165,265	165,265	165,265	165,265

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Table shows robustness of IV results to specification choice. "No X" includes only court-by-year fixed effects, "Base X IV" includes a limited set of demographic controls, and "Main IV" replicates our main specification. "Main RF" presents reduced form estimates under our main specification. Approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-P2476-R11514.

Table C.2: Robustness to Controls and RF: Schooling Disruption and Engagement (Education Sample)

	Chicago				New York				Combined			
	No X IV	Base X IV	Main IV	Main RF	No X IV	Base X IV	Main IV	Main RF	No X IV	Base X IV	Main IV	Main RF
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Case school year:												
Not at pre-case school	0.369***	0.378***	0.371***	0.429***	0.021	0.018	0.018	0.015	0.078***	0.077***	0.076**	0.083***
	(0.080)	(0.081)	(0.081)	(0.088)	(0.032)	(0.032)	(0.032)	(0.027)	(0.030)	(0.030)	(0.030)	(0.027)
Percent absent	0.007	0.006	-0.010	-0.010	0.006	0.004	0.012	0.010	0.006	0.004	0.009	0.007
	(0.027)	(0.026)	(0.022)	(0.022)	(0.014)	(0.013)	(0.009)	(0.008)	(0.012)	(0.012)	(0.008)	(0.007)
Chronic absent	0.231**	0.224**	0.121	0.123	0.036	0.029	0.052	0.044	0.061	0.054	0.061	0.054
	(0.116)	(0.114)	(0.093)	(0.095)	(0.049)	(0.049)	(0.043)	(0.037)	(0.045)	(0.045)	(0.039)	(0.034)
Transferred out of school system	-0.036	-0.037	-0.042	-0.045	0.014	0.013	0.013	0.011	0.005	0.003	0.002	-0.000
	(0.048)	(0.048)	(0.048)	(0.051)	(0.018)	(0.018)	(0.018)	(0.016)	(0.018)	(0.017)	(0.017)	(0.016)
Observations	51,522	51,522	51,522	51,522	278,879	278,879	278,879	278,879	330,401	330,401	330,401	330,401
Post-filing school year 1:												
Not at pre-case school	0.283***	0.285***	0.280***	0.349***	0.044	0.042	0.038	0.033	0.084**	0.083**	0.079**	0.086**
	(0.087)	(0.090)	(0.088)	(0.107)	(0.044)	(0.044)	(0.044)	(0.038)	(0.039)	(0.040)	(0.040)	(0.036)
Percent absent	0.047**	0.046**	0.028	0.032	0.025*	0.022	0.023**	0.019**	0.028**	0.025**	0.024**	0.021**
	(0.023)	(0.023)	(0.020)	(0.022)	(0.014)	(0.014)	(0.011)	(0.010)	(0.013)	(0.013)	(0.010)	(0.009)
Chronic absent	0.342***	0.337***	0.228***	0.257***	0.071	0.062	0.069	0.058	0.105**	0.097**	0.090**	0.083**
	(0.095)	(0.095)	(0.085)	(0.094)	(0.050)	(0.050)	(0.047)	(0.040)	(0.045)	(0.045)	(0.042)	(0.037)
Retained	0.015	0.012	0.009	0.011	0.028	0.027	0.027	-0.002	0.026	0.025	0.024	0.000
	(0.044)	(0.044)	(0.045)	(0.055)	(0.027)	(0.027)	(0.027)	(0.026)	(0.024)	(0.024)	(0.024)	(0.024)
Transferred out of school system	-0.024	-0.030	-0.031	-0.034	0.009	0.009	0.008	0.007	0.003	0.001	0.001	-0.001
	(0.050)	(0.050)	(0.050)	(0.054)	(0.015)	(0.015)	(0.015)	(0.013)	(0.016)	(0.016)	(0.016)	(0.015)
Observations	46,519	46,519	46,519	46,519	251,730	251,730	251,730	244,350	298,249	298,249	298,249	290,869
Post-filing school year 2:												
Not at pre-case school	0.260***	0.263***	0.258***	0.315***	0.047	0.038	0.037	0.031	0.085*	0.078	0.077	0.082*
	(0.096)	(0.099)	(0.095)	(0.113)	(0.058)	(0.058)	(0.058)	(0.049)	(0.050)	(0.051)	(0.051)	(0.045)
Percent absent	0.007	0.008	-0.006	-0.008	0.035**	0.032*	0.028*	0.023*	0.032**	0.029*	0.024*	0.019*
	(0.023)	(0.023)	(0.022)	(0.026)	(0.017)	(0.017)	(0.015)	(0.013)	(0.015)	(0.015)	(0.014)	(0.012)
Chronic absent	0.091	0.092	0.024	0.028	0.090*	0.077	0.062	0.051	0.090**	0.079*	0.057	0.048
	(0.088)	(0.086)	(0.084)	(0.100)	(0.047)	(0.049)	(0.047)	(0.039)	(0.043)	(0.044)	(0.043)	(0.037)
Retained	0.066	0.065	0.058	0.075	0.055*	0.052	0.052	0.018	0.056**	0.054*	0.053*	0.028
	(0.054)	(0.053)	(0.053)	(0.069)	(0.032)	(0.032)	(0.032)	(0.028)	(0.028)	(0.028)	(0.028)	(0.026)
Transferred out of school system	0.051	0.042	0.041	0.046	0.026	0.026	0.026	0.022	0.031*	0.029*	0.029*	0.026
	(0.057)	(0.056)	(0.056)	(0.062)	(0.016)	(0.016)	(0.016)	(0.014)	(0.017)	(0.017)	(0.017)	(0.016)
Observations	41,084	41,084	41,084	41,084	220,181	220,181	220,181	213,532	261,264	261,264	261,264	254,616

Notes: * p < 0.1, ** p < 0.05, *** p < 0.01. Table shows robustness of IV results to specification choice. "No X" includes only court-by-year fixed effects, "Base X IV" includes a limited set of demographic controls, and "Main IV" replicates our main specification. "Main RF" presents reduced form estimates under our main specification.

Table C.3: Robustness to Controls and RF: High school Credit Accumulation and GPA (Education Sample)

	Chicago				New York				Combined			
	No X IV	Base X IV	Main IV	Main RF	No X IV	Base X IV	Main IV	Main RF	No X IV	Base X IV	Main IV	Main RF
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Case school year:												
Credits	-0.207	-0.274	-0.227	-0.196	-0.071	-0.065	-0.081	-0.071	-0.077	-0.074	-0.088	-0.077
	(0.184)	(0.187)	(0.177)	(0.148)	(0.063)	(0.060)	(0.056)	(0.051)	(0.060)	(0.058)	(0.054)	(0.049)
GPA	-0.502	-0.404	-0.428	-0.437								
	(0.435)	(0.405)	(0.279)	(0.284)								
Observations	6,137	6,137	6,137	6,137	68,604	68,604	68,604	68,604	71,768	71,768	71,768	71,768
Post-filing school year 1:												
Credits	-0.261*	-0.306**	-0.276**	-0.316***	-0.121*	-0.120*	-0.138**	-0.124**	-0.127*	-0.128*	-0.144**	-0.131**
	(0.135)	(0.134)	(0.126)	(0.121)	(0.068)	(0.068)	(0.064)	(0.058)	(0.066)	(0.065)	(0.062)	(0.056)
GPA	-0.367	-0.402	-0.291	-0.329								
	(0.422)	(0.386)	(0.329)	(0.365)								
Observations	6,054	6,054	6,054	6,054	74,312	74,312	74,312	74,312	77,454	77,454	77,454	77,454
Post-filing school year 2:												
Credits	-0.119	-0.141	-0.134	-0.178	-0.140*	-0.142*	-0.143*	-0.112*	-0.139*	-0.142*	-0.143*	-0.115*
	(0.092)	(0.092)	(0.091)	(0.117)	(0.085)	(0.084)	(0.084)	(0.066)	(0.081)	(0.081)	(0.080)	(0.063)
GPA	-0.375	-0.377	-0.243	-0.322								
	(0.344)	(0.327)	(0.309)	(0.406)								
Observations	6,243	6,243	6,243	6,243	71,766	71,766	71,766	71,766	75,165	75,165	75,165	75,165

Notes: * p < 0.1, ** p < 0.05, *** p < 0.01. Table shows robustness of IV results to specification choice. "No X" includes only court-by-year fixed effects, "Base X IV" includes a limited set of demographic controls, and "Main IV" replicates our main specification. "Main RF" presents reduced form estimates under our main specification.

Table C.4: Robustness to Controls and RF: Graduation (Education Sample; Grade 6 to 12)

	Chicago			New York			Combined		
	No X IV	Main IV	Main RF	No X IV	Main IV	Main RF	No X IV	Main IV	Main RF
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Graduation	-0.108	-0.103	-0.147	-0.137**	-0.128**	-0.107**	-0.133**	-0.125**	-0.112**
	(0.094)	(0.095)	(0.136)	(0.062)	(0.056)	(0.049)	(0.056)	(0.051)	(0.046)
Graduation status not observed	0.090	0.085	0.105	0.071*	0.063	0.054	0.074**	0.066*	0.062*
	(0.092)	(0.092)	(0.111)	(0.041)	(0.039)	(0.034)	(0.037)	(0.036)	(0.033)
Observations	20,960	20,960	20,960	129,452	129,452	129,452	150,413	150,413	150,413

Notes: * p < 0.1, ** p < 0.05, *** p < 0.01. Table shows robustness of IV results to specification choice. "No X" includes only court-by-year fixed effects and "Main IV" replicates our main specification. "Main RF" presents reduced form estimates under our main specification.

Table C.5: Robustness to Controls and RF: Living Arrangements, Household Structure, and Geography (Census Sample)

	No X IV	Main IV	Main RF
	(1)	(2)	(3)
Living Arrangements			
Total household size	0.601	0.686	0.640
	(0.476)	(0.480)	(0.461)
Doubling up (incl. grandparents)	0.166**	0.169**	0.158***
	(0.079)	(0.077)	(0.068)
Doubling up (excl. grandparents)	0.102	0.102	0.095
	(0.072)	(0.072)	(0.064)
Multigenerational household	0.127**	0.132***	0.123***
	(0.058)	(0.054)	(0.053)
Grandparent household head	0.098*	0.097**	0.091**
	(0.052)	(0.048)	(0.045)
Household Structure			
Mother present	0.005	0.018	0.017
	(0.060)	(0.058)	(0.054)
Father present	-0.009	0.003	0.003
	(0.097)	(0.101)	(0.095)
Single mother	-0.005	-0.008	-0.008
	(0.108)	(0.099)	(0.094)
Non-relative household head	0.004	-0.000	-0.000
	(0.027)	(0.027)	(0.025)
Geography			
Neighborhood poverty rate	-0.061**	-0.051**	-0.048*
	(0.024)	(0.025)	(0.025)
Out of county	-0.014	-0.028	-0.026
	(0.064)	(0.070)	(0.065)
Out of state	-0.011	-0.015	-0.014
	(0.052)	(0.055)	(0.050)
Observations	48,000	48,000	48,000

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Table shows robustness of IV results to specification choice. The "No X" column specification includes only district-year fixed effects as controls, and the "Main IV" reproduces our main specification. The "Main RF" column shows the estimate of a regression of the outcome on the instrument with the main set of controls. Approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-P2476-R10965. Results rounded following Census Bureau disclosure guidelines.

D Details on the Bounding Approach

D.1 Partial identification approach

We follow the notation and approach developed in Section 6.4.1. Let Y denote an outcome (e.g., graduation), S denote being observed in the sample, E denote eviction status (treatment), and Z denote the instrument. To develop our approach, we implicitly condition on covariates and suppose that individuals are assigned to instrument $Z = z_1$ or $Z = z_0$. We discuss implementation using covariates and the full range of instrument values Z in Appendix D.2.

The researcher observes the distribution (YS, S, D, Z), where $YS = Y$ when $S = 1$ and $YS = 0$ when $S = 0$ captures that the outcome is only observed for those in the sample. The observed data relates to potential variables via $Y = Y(E)$, $S = S(E)$, and $E = E(Z)$. Throughout, we will maintain the IV assumptions that Z is independent of potential variables $(Y(0), Y(1), S(0), S(1), \{E(z)\}_z)$ and that, for any pair of instrument (z, z'), $E(z) \geq E(z')$ for everyone or that $E(z) \leq E(z')$ for everyone. Additionally, we will impose the sample selection monotonicity assumption of Lee (2009) that $S(1) \leq S(0)$ for everyone. In Appendix D.4, we show how to adapt our results to the case where $S(1) \geq S(0)$ for everyone.

Intuitively, the reason we cannot identify a causal effect in this setting is that we have a sample selection problem arising from individuals who have $S(0) = 1$ and $S(1) = 0$. Although these individuals are part of the sample when not evicted (because $S(0) = 1$), they are not part of the sample when evicted (because $S(1) = 0$).

Letting $T = c$ denote the instrument compliers (i.e. those with $E(z_0) = 0, E(z_1) = 1$), our bounding approach starts by noting that

$$\frac{\mathbb{E}[YSE|Z = z_1] - \mathbb{E}[YSE|Z = z_0]}{\mathbb{E}[SE|Z = z_1] - \mathbb{E}[SE|Z = z_0]} = \mathbb{E}[Y(1)|T = c, S(1) = 1], \tag{D.1}$$

and

$$\frac{\mathbb{E}[YS(1-E)|Z = z_1] - \mathbb{E}[YS(1-E)|Z = z_0]}{\mathbb{E}[S(1-E)|Z = z_1] - \mathbb{E}[S(1-E)|Z = z_0]} = \mathbb{E}[Y(0)|T = c, S(0) = 1]. \tag{D.2}$$

See Appendix D.5 for the derivations. Define μ as the (point identified) difference, i.e.

$$\mu \equiv \frac{\mathbb{E}[YSE|Z = z_1] - \mathbb{E}[YSE|Z = z_0]}{\mathbb{E}[SE|Z = z_1] - \mathbb{E}[SE|Z = z_0]} - \frac{\mathbb{E}[YS(1-E)|Z = z_1] - \mathbb{E}[YS(1-E)|Z = z_0]}{\mathbb{E}[S(1-E)|Z = z_1] - \mathbb{E}[S(1-E)|Z = z_0]}. \tag{D.3}$$

Combining the above, we then have that

$$\mu = \mathbb{E}[Y(1)|T = c, S(1) = 1] - \mathbb{E}[Y(0)|T = c, S(0) = 1]. \tag{D.4}$$

This is not a treatment effect because compliers with $S(1) = 1$ may be different from those with $S(0) = 1$. However, using the assumption that $S(1) \leq S(0)$, one can show that

$$\mu = \underbrace{\mathbb{E}[Y(1) - Y(0)|T = c, S(0) = 1, S(1) = 1]}_{\text{LATE-AO}} \tag{D.5}$$

$$- \underbrace{\left(\mathbb{E}[Y(0)|\underbrace{T = c, S(0) = 1, S(1) = 0}_{\text{observed-only-when-untreated}}] - \mathbb{E}[Y(0)|\underbrace{T = c, S(0) = 1, S(1) = 1}_{\text{always-observed}}] \right)}_{\equiv\ \delta^\star} \tag{D.6}$$

$$\times \underbrace{\mathbb{P}[S(1) = 0|T = c, S(0) = 1]}_{\equiv \pi}. \tag{D.7}$$

Again, see Appendix D.5 for the derivation.

Thus, equation (D.4) equals the LATE-AO (the treatment effect for the compliers who would stay in the sample irrespective of treatment), plus a bias term that is the down-weighted difference ($\delta^\star$) between the means of $Y(0)$ for two groups. The first group is the is the observed-only-when-untreated compliers who would stay in the sample when not evicted, but would leave when evicted. The second group is the always-observed compliers who would stay in the sample irrespective of eviction status. Importantly, because both groups stay in the sample when not evicted, the $Y(0)$ is the potential outcome when not evicted and in the sample for both groups. This difference is down-weighted by the share (π) in (D.7), which is the share who would leave the sample when evicted among compliers who would stay in the sample when not evicted.

We showed above that we point identify μ. In Appendix D.5, we also show that π is point identified via

$$\pi = \frac{\mathbb{E}[S|Z = z_1] - \mathbb{E}[S|Z = z_0]}{\mathbb{E}[S(1 - E)|Z = z_1] - \mathbb{E}[S(1 - E)|Z = z_0]}. \tag{D.8}$$

Re-arranging (D.5)-(D.7), we have:

$$\mathbb{E}[Y(1) - Y(0)|T = c, S(0) = 1, S(1) = 1] = \overbrace{\mu}^{\text{known}} + \underbrace{\delta^\star}_{\text{unknown}} \overbrace{\pi}^{\text{known}}$$

Although we cannot generally identify $\delta^\star$ from the data, we can impose restrictions on the magnitude. Suppose that (D.6) is assumed to lie in a chosen interval $[\delta_L, \delta_U]$. Then it must be that

$$\mathbb{E}[Y(1) - Y(0)|T = c, S(0) = 1, S(1) = 1] \in [\mu + \delta_L \pi\ ,\ \mu + \delta_U \pi], \tag{D.9}$$

where all the components of the bounds are known. The bounding exercise we propose is to construct bounds for the LATE-AO in (D.9) for different choices of intervals $[\delta_L, \delta_U]$. In particular, a natural choice is to consider a $\delta > 0$ and take $\delta_L = -\delta$ and $\delta_U = \delta$. By varying this value of δ, we can assess the sensitivity of our conclusions to the choice of δ, where δ is the largest (absolute) difference that the expression in (D.6) (i.e. $\delta^\star$) can take. Additionally, δ has a simple interpretation, so that the choice of value can be guided by context-specific considerations.

D.2 Estimation and inference

D.2.1 Estimation

Given a choice of δ_L and δ_U, the bounds can be estimated by first estimating μ and π as in equations (D.3) and (D.8). These quantities can be obtained via TSLS regressions with judicious choices of "outcome" and "treatment." In particular, let $\hat{\mu}_1$ be the TSLS estimator with outcome YSE, treatment SE, and instrument Z. Similarly, define $\hat{\mu}_0$ as the TSLS estimator with outcome $YS(1-E)$, treatment $S(1-E)$, and instrument Z, and define $\hat{\pi}$ as the TSLS estimator with outcome S, treatment $S(1-E)$, and instrument Z.

With a binary instrument, the TSLS estimators $(\hat{\mu}_1, \hat{\mu}_0, \hat{\pi})$ equal the WALD estimators and are thus consistent estimators of the parameters in equations (D.1), (D.2), and (D.8). By the continuous mapping theorem, $\hat{\theta}_L \equiv (\hat{\mu}_1 - \hat{\mu}_0) + \hat{\pi}\delta_L$ and $\hat{\theta}_U \equiv (\hat{\mu}_1 - \hat{\mu}_0) + \hat{\pi}\delta_U$ are consistent estimators of the bounds in (D.9), which we denote as $\theta_L \equiv (\mu_1 - \mu_0) + \pi\delta_L$ and $\theta_U \equiv (\mu_1 - \mu_0) + \pi\delta_U$. Under the maintained assumptions, the LATE-AO $\theta^\star \equiv (m_1 - m_0) + \pi\delta^\star$ is in $[\theta_L, \theta_U]$.

With a non-binary instrument and with covariates X, we replace the above TSLS estimators with TSLS estimators that includes Z linearly and includes X linearly in the first and second stages. With some abuse of notation, we denote these TSLS estimators as $(\hat{\mu}_1, \hat{\mu}_0, \hat{\pi})$, which converge to the estimands (μ_1, μ_0, π). We can use them to construct the estimators $\hat{\theta}_L \equiv (\hat{\mu}_1 - \hat{\mu}_0) + \hat{\pi}\delta_L$ and $\hat{\theta}_U \equiv (\hat{\mu}_1 - \hat{\mu}_0) + \hat{\pi}\delta_U$, which are consistent estimators of $\theta_L \equiv (\mu_1 - \mu_0) + \pi\delta_L$ and $\theta_U \equiv (\mu_1 - \mu_0) + \pi\delta_U$. Letting $\theta^\star \equiv (m_1 - m_0) + \pi\delta^\star$, we again have that $\theta^\star \in [\theta_L, \theta_U]$. Assuming correctly-specified TSLS specifications, this approach can be interpreted as recovering a positively-weighted average of LATE-AO among compliers.

D.2.2 Inference

The vector of TSLS estimators $(\hat{\mu}_1, \hat{\mu}_0, \hat{\pi})$ are asymptotically jointly normal. By the delta method, $\hat{\theta}_L$ and $\hat{\theta}_U$ are jointly asymptotically normal, so that

$$\sqrt{n}\begin{bmatrix}(\hat{\theta}_L-\theta_L)\\(\hat{\theta}_U-\theta_U)\end{bmatrix}\xrightarrow{d} N\left(\begin{bmatrix}0\\0\end{bmatrix},\begin{bmatrix}\sigma_L^2 & \rho\sigma_L\sigma_U\\ \rho\sigma_L\sigma_U & \sigma_U^2\end{bmatrix}\right). \tag{D.10}$$

To construct a $1-\alpha$ confidence interval of $\theta^\star$, we use the ideas of Imbens and Manski (2004); Stoye (2009). Let $z_{1-\alpha}$ be the $1-\alpha$ quantile of the standard normal distribution. Define $CI_{n,1-\alpha}$ as

$$CI_{n,1-\alpha}\equiv\left[\hat{\theta}_L-z_{1-\alpha}\frac{\hat{\sigma}_L}{\sqrt{n}}\ ,\ \hat{\theta}_U+z_{1-\alpha}\frac{\hat{\sigma}_U}{\sqrt{n}}\right]. \tag{D.11}$$

To show that $CI_{n,1-\alpha}$ is a valid (asymptotic) confidence interval, consider any distribution F of (YS, S, D, Z) such that $\pi > 0$. Also consider any $\delta_L < \delta_U$. In Appendix D.5, we derive that:

$$\lim_{n\to\infty}\mathbb{P}[\theta^\star\in CI_{n,1-\alpha}]\geq 1-\alpha. \tag{D.12}$$

The result follows the arguments in Imbens and Manski (2004), though we do not impose that the estimators for the bound endpoints need not be well-ordered with probability one.

To construct these confidence intervals, we only need to additionally obtain $\hat{\sigma}_L$ and $\hat{\sigma}_U$, which we do via bootstrap.

Uniform validity of $CI_{n,1-\alpha}$. Above, we showed that $CI_{n,1-\alpha}$ is a point-wise (asymptotically) valid confidence interval, which means that it is valid given an F with $\pi > 0$. In problems similar to ours, there has been interest in whether the confidence intervals are valid uniformly over some specified (large) set of distributions. In particular, Imbens and Manski (2004) show that $CI_{n,1-\alpha}$ is not uniformly valid. The key issue arises from considering sequences of distributions where $\theta_U - \theta_L \to 0$. They and Stoye (2009) accordingly consider additional assumptions on the set of considered distributions and modifications to $CI_{n,1-\alpha}$, which together ensure uniform validity.

Uniformity is necessarily obtained only under restrictions on the set of considered distributions F. The derivation of (D.12) suggests one possible uniform validity statement if we are willing to assume that $\pi \geq \underline{\pi} > 0$ for some pre-specified $\underline{\pi}$. In words, this assumes that the share of "observed-only-when-untreated" among the always-observed must be bounded above 0 by a known value. In Appendix D.5, we show that $CI_{n,1-\alpha}$ is uniformly valid over sets of distributions $\mathcal{F}$ such that this assumption holds and such that the estimators $\hat{\theta}_L$ and $\hat{\theta}_U$ satisfy certain uniformity conditions (see Appendix D.5 for a precise statement). In particular, for any such

$\mathcal{F}$, we show that:

$$\lim_{n\to\infty} \inf_{F\in\mathcal{F}} \mathbb{P}[\theta^\star \in CI_{n,1-\alpha}] \geq 1-\alpha. \tag{D.13}$$

We largely avoid further considerations of uniform validity for both theoretical and practical reasons. In our setting, $\theta_U - \theta_L \to 0$ occurs over any sequence of distributions where $\pi \to 0$. However, recalling that π is a TSLS/WALD estimand, studying this problem would additionally have to consider the problem of weak instruments when considering sequences of distributions for which $\pi \to 0$. This consideration would need to be accounted for in addition to the other considerations discussed by Imbens and Manski (2004); Stoye (2009).

From a practical perspective, we view our point-wise and uniform asymptotic validity results as sufficient. In particular, the problem of differential sample selection is often a concern for settings where π is a priori known to be non-trivial, which is what we maintain when imposing that $\pi \geq \underline{\pi}$. However, as a last robustness check to our inference results, we implement the confidence interval procedure proposed in Lemma 4 of Imbens and Manski (2004), noting that the required super-efficiency condition likely fails (since the bound endpoints need not be well-ordered with probability one as $\hat{\pi}$ is need not be positive with probability one).. Using this approach, we continue to reject that the LATE-AO for graduation contains zero at the 0.1 level even as we take $\delta_L = -0.10$ and $\delta_U = 0.10$.

D.3 Combining bounds across cities

To estimate bounds that combine across cities, we proceed as in Section 5.4. Let ω be the observation weight for New York City. Letting $\theta^\star_j$ denote the parameter of interest in city j and letting $\theta_{L,j}$ and $\theta_{U,j}$ denote the bounds for city j, it follows that

$$\theta^\star_{\text{combined}} \equiv \omega\theta^\star_{NYC} + (1-\omega)\theta^\star_{CC} \in [\omega\theta_{L,NYC} + (1-\omega)\theta_{L,CC}\ ,\ \omega\theta_{U,NYC} + (1-\omega)\theta_{U,CC}]\,. \tag{D.14}$$

We can estimate these bounds using the city-specific estimates. To do inference, we calculate the standard deviations of the endpoints of the estimated bounds as

$$\hat{\sigma}_{L,\text{combined}} = \sqrt{\omega^2\hat{\sigma}^2_{L,NYC} + (1-\omega)^2\hat{\sigma}^2_{L,CC}} \tag{D.15}$$

with an analogous expression for $\hat{\sigma}_{U,\text{combined}}$. The rest proceeds as above.

D.4 The case when $S(1) \geq S(0)$

We can easily adapt the above arguments to the case where the natural assumption is instead that $S(1) \geq S(0)$ always. Again, it is the case that (D.1) and (D.2) hold. Recycling the same notation and defining μ as before (see equation D.4), we now have that

$$\mu = \underbrace{\mathbb{E}[Y(1) - Y(0)|T = c, S(0) = 1, S(1) = 1]}_{\text{LATE-AO}} \tag{D.16}$$

$$- \underbrace{\left(\mathbb{E}[Y(1)|\underbrace{T = c, S(0) = 1, S(1) = 1}_{\text{always-observed}}] - \mathbb{E}[Y(1)|\underbrace{T = c, S(0) = 1, S(1) = 0}_{\text{observed-only-when-untreated}}]\right)}_{\equiv\, \delta^\star} \tag{D.17}$$

$$\times \underbrace{\mathbb{P}[S(0) = 0|T = c, S(1) = 1]}_{\equiv \pi}, \tag{D.18}$$

with

$$\pi = \frac{\mathbb{E}[S|Z = z_1] - \mathbb{E}[S|Z = z_0]}{\mathbb{E}[SE|Z = z_1] - \mathbb{E}[SE|Z = z_0]}. \tag{D.19}$$

These derivations follow the same steps as the derivations for (D.5)-(D.7) and for (D.8), but now instead using that $S(1) \geq S(0)$ always implies

$$\mathbb{E}[Y(1)|T = c, S(1) = 1] = \mathbb{E}[Y(1)|T = c, S(0) = 0, S(1) = 1](1 - \pi) \tag{D.20}$$

$$+ \mathbb{E}[Y(1)|T = c, S(0) = 1, S(1) = 1]\pi \tag{D.21}$$

and that

$$\mathbb{E}[Y(0)|T = c, S(0) = 1] = \mathbb{E}[Y(1)|T = c, S(0) = 1, S(1) = 1]. \tag{D.22}$$

Note that $\delta^\star$ is now the difference in average potential outcomes when treated between the always-observed and the observed-only-when-untreated. In particular, supposing that $\delta^\star \in [\delta_L, \delta_U]$, we again have that

$$\mathbb{E}[Y(1) - Y(0)|T = c, S(0) = 1, S(1) = 1] \in [\mu + \delta_L\pi \ , \ \mu + \delta_U\pi]. \tag{D.23}$$

As above, we can estimate these bounds by letting $\hat{\mu}_1$ be the TSLS estimator with outcome YSE, treatment SE, and instrument Z, and $\hat{\mu}_0$ as the TSLS estimator with outcome $YS(1-E)$, treatment $S(1-E)$, and instrument Z. The only difference is that $\hat{\pi}$ is now the TSLS estimator with outcome S, treatment SE, and instrument Z. The estimated bounds are again $\hat{\theta}_L \equiv (\hat{\mu}_1 - \hat{\mu}_0) - \hat{\pi}\delta_L$ and $\hat{\theta}_U \equiv (\hat{\mu}_1 - \hat{\mu}_0) + \hat{\pi}\delta_U$, and the rest (including inference) proceeds as above.

D.5 Derivations

D.5.1 Identification

Deriving (D.1) and (D.2). To derive (D.1), note that $YSE = Y(1)S(1)E(Z)$, so that

$$\mathbb{E}[YSE|Z = z_1] - \mathbb{E}[YSE|Z = z_0] = \mathbb{E}[Y(1)S(1)(E(1) - E(0))] \tag{D.24}$$

$$= \mathbb{E}[Y(1)|T = c, S(1) = 1]\, \mathbb{P}[T = c, S(1) = 1]. \tag{D.25}$$

Also, $SE = S(1)E(Z)$ so that

$$\mathbb{E}[SE|Z = z_1] - \mathbb{E}[SE|Z = z_0] = \mathbb{P}[T = c, S(1) = 1]. \tag{D.26}$$

Dividing the two, we have

$$\frac{\mathbb{E}[YSE|Z = z_1] - \mathbb{E}[YSE|Z = z_0]}{\mathbb{E}[SE|Z = z_1] - \mathbb{E}[SE|Z = z_0]} = \frac{\mathbb{E}[Y(1)|T = c, S(1) = 1]\, \mathbb{P}[T = c, S(1) = 1]}{\mathbb{P}[T = c, S(1) = 1]} \tag{D.27}$$

$$= \mathbb{E}[Y(1)|T = c, S(1) = 1], \tag{D.28}$$

as required. Analogous arguments hold for (D.2).

Deriving the decomposition in (D.5)-(D.7). Since $S(1) \leq S(0)$ wp1, we have that those with $S(1) = 1$ are equivalently those with $S(0) = 1, S(1) = 1$. Thus,

$$\mu = \mathbb{E}[Y(1)|T = c, S(1) = 1] - \mathbb{E}[Y(0)|T = c, S(0) = 1] \tag{D.29}$$

$$= \mathbb{E}[Y(1)|T = c, S(0) = 1, S(1) = 1] - \mathbb{E}[Y(0)|T = c, S(0) = 1], \tag{D.30}$$

Letting $\pi \equiv \mathbb{P}[S(1) = 0|T = c, S(0) = 1]$ and applying the law of iterated expectations,

$$\mathbb{E}[Y(0)|T = c, S(0) = 1] \tag{D.31}$$

$$= \mathbb{E}[Y(0)|T = c, S(0) = 1, S(1) = 0]\pi \tag{D.32}$$

$$+ \mathbb{E}[Y(0)|T = c, S(0) = 1, S(1) = 1](1 - \pi) \tag{D.33}$$

$$= \mathbb{E}[Y(0)|T = c, S(0) = 1, S(1) = 1] \tag{D.34}$$

$$+ \Big(\mathbb{E}[Y(0)|T = c, S(0) = 1, S(1) = 0] - \mathbb{E}[Y(0)|T = c, S(0) = 1, S(1) = 1] \Big)\pi. \tag{D.35}$$

Plugging this into (D.30) and re-arranging, we have

$$\mu = \mathbb{E}[Y(1) - Y(0)|T = c, S(0) = 1, S(1) = 1]] \tag{D.36}$$
$$- \Big(\mathbb{E}[Y(0)|T = c, S(0) = 1, S(1) = 0] - \mathbb{E}[Y(0)|T = c, S(0) = 1, S(1) = 1]\Big)\pi, \tag{D.37}$$

as required.

Deriving (D.8). Observe that $S = S(0) + (S(1) - S(0))E(Z)$ so that

$$\mathbb{E}[S|Z = z_1] - \mathbb{E}[S|Z = z_0] = \mathbb{E}[(S(1) - S(0))(E(1) - E(0))] = -\mathbb{P}[T = c, S(0) = 1, S(1) = 0]. \tag{D.38}$$

Also since $S(1 - E) = S(0)(1 - E(Z))$, then

$$\mathbb{E}[S(1 - E)|Z = z_1] - \mathbb{E}[S(1 - E)|Z = z_0] = -\mathbb{E}[S(0)(E(1) - E(0))] = -\mathbb{P}[T = c, S(0) = 1]. \tag{D.39}$$

Dividing the two yields

$$\frac{\mathbb{E}[S|Z = z_1] - \mathbb{E}[S|Z = z_0]}{\mathbb{E}[S(1 - E)|Z = z_1] - \mathbb{E}[S(1 - E)|Z = z_0]} = \frac{\mathbb{P}[T = c, S(0) = 1, S(1) = 0]}{\mathbb{P}[T = c, S(0) = 1]} \tag{D.40}$$
$$= \mathbb{P}[S(1) = 0|T = c, S(0) = 1], \tag{D.41}$$

as required.

D.5.2 Inference

Deriving point-wise validity of $CI_{n,1-\alpha}$. To show (D.12), note that

$$\lim_{n\to\infty} \mathbb{P}[\theta^\star \in CI_{n,1-\alpha}] \tag{D.42}$$
$$= \lim_{n\to\infty} \mathbb{P}[\hat{\theta}_L - z_{1-\alpha}\frac{\hat{\sigma}_L}{\sqrt{n}} \leq \theta^\star \leq \hat{\theta}_U + z_{1-\alpha}\frac{\hat{\sigma}_U}{\sqrt{n}}] \tag{D.43}$$
$$= \lim_{n\to\infty} \mathbb{P}[\hat{\theta}_L - z_{1-\alpha}\frac{\hat{\sigma}_L}{\sqrt{n}} \leq \theta^\star] \tag{D.44}$$
$$+ \mathbb{P}[\theta^\star \leq \hat{\theta}_U + z_{1-\alpha}\frac{\hat{\sigma}_U}{\sqrt{n}}] \tag{D.45}$$
$$+ \mathbb{P}\left[\hat{\theta}_L - z_{1-\alpha}\frac{\hat{\sigma}_L}{\sqrt{n}} \leq \theta^\star \text{ OR } \theta^\star \leq \hat{\theta}_U - z_{1-\alpha}\frac{\hat{\sigma}_U}{\sqrt{n}}\right]. \tag{D.46}$$

We know $\theta^\star \in [\theta_L, \theta_U]$. We have three cases: $\theta^\star = \theta_L$, $\theta^\star = \theta_U$, or $\theta^\star \in (\theta_L, \theta_U)$. If $\theta^\star = \theta_L$, then (D.44) becomes

$$\mathbb{P}\left[-z_{1-\alpha} \leq \frac{\sqrt{n}(\theta_L - \hat{\theta}_L)}{\hat{\sigma}_L}\right] \to 1 - \alpha, \tag{D.47}$$

while (D.45)becomes

$$\mathbb{P}\left[\theta_L \leq \hat{\theta}_U + z_{1-\alpha}\frac{\hat{\sigma}_U}{\sqrt{n}}\right] = \mathbb{P}\left[\theta_U - \hat{\theta}_U \leq \theta_U - \theta_L + z_{1-\alpha}\frac{\hat{\sigma}_U}{\sqrt{n}}\right] \tag{D.48}$$

$$= \mathbb{P}\left[(\theta_U - \hat{\theta}_U) - z_{1-\alpha}\frac{\hat{\sigma}_U}{\sqrt{n}} \leq (\delta_U - \delta_L)\pi\right] \to 0, \tag{D.49}$$

where we use that $\theta_U - \theta_L = (\mu_1 - \mu_0) + \delta_U\pi - (\mu - \mu_0) - \delta_L\pi = (\delta_U - \delta_L)\pi$ and appealed to convergence in probability of the LHS term in the last line. This same argument holds for (D.46), so that $\lim_{n\to\infty} \mathbb{P}[\theta^\star \in CI_{n,1-\alpha}] = 1 - \alpha$. The case of $\theta^\star = \theta_U$ proceeds analogously, and the above arguments also immediately imply that when $\theta^\star \in (\theta_L, \theta_U)$, then $\lim_{n\to\infty} \mathbb{P}[\theta^\star \in CI_{n,1-\alpha}] = 1$, as required.

Deriving uniformly validity of $CI_{n,1-\alpha}$. Fix some $\underline{\pi} > 0$. Let $\mathcal{F}$ be any set of distributions F such that:

$$\pi \geq \underline{\pi} \text{ for all } F \tag{D.50}$$

$$\hat{\theta}_L \xrightarrow{p} \theta_L \text{ and } \hat{\theta}_U \xrightarrow{p} \theta_U \text{ uniformly over } \mathcal{F} \tag{D.51}$$

$$\lim_{n\to\infty} \inf_{F\in\mathcal{F}} \mathbb{P}\left[\frac{\sqrt{n}(\theta_U - \hat{\theta}_U)}{\hat{\sigma}_U} \leq z_{1-\alpha}\right] \to 1 - \alpha. \tag{D.52}$$

$$\lim_{n\to\infty} \inf_{F\in\mathcal{F}} \mathbb{P}\left[-z_{1-\alpha} \leq \frac{\sqrt{n}(\theta_L - \hat{\theta}_L)}{\hat{\sigma}_L}\right] \to 1 - \alpha. \tag{D.53}$$

The first condition about π was discussed previously. The latter three assumptions are uniformity conditions about the estimators of the endpoints of the bounds. If these endpoints were sample means, then these kinds of assumptions would follow from Berry-Essen type results (see, e.g., Lemma 6 of Imbens and Manski (2004)). For any such $\mathcal{F}$, we claim that (D.13) holds. This follows from the above derivations of the point-wise validity of $CI_{n,1-\alpha}$. In particular, following those steps, we have that (D.13) is weakly greater than

$$\lim_{n\to\infty} \inf_{F\in\mathcal{F}} \mathbb{P}[\hat{\theta}_L - z_{1-\alpha}\frac{\hat{\sigma}_L}{\sqrt{n}} \leq \theta^\star] \tag{D.54}$$

$$+ \lim_{n\to\infty} \inf_{F\in\mathcal{F}} \mathbb{P}[\theta^\star \leq \hat{\theta}_U + z_{1-\alpha}\frac{\hat{\sigma}_U}{\sqrt{n}}] \tag{D.55}$$

$$+ \lim_{n\to\infty} \inf_{F\in\mathcal{F}} \mathbb{P}\left[\hat{\theta}_L - z_{1-\alpha}\frac{\hat{\sigma}_L}{\sqrt{n}} \leq \theta^\star \text{ OR } \theta^\star \leq \hat{\theta}_U - z_{1-\alpha}\frac{\hat{\sigma}_U}{\sqrt{n}}\right]. \tag{D.56}$$

We again have three cases for $\theta^\star$. Considering the case where $\theta^\star = \theta_L$, we showed in the point-wise derivations that (D.54) equals

$$\lim_{n\to\infty} \inf_{F\in\mathcal{F}} \mathbb{P}\left[-z_{1-\alpha} \leq \frac{\sqrt{n}(\theta_L - \hat{\theta}_L)}{\hat{\sigma}_L}\right] \to 1-\alpha, \tag{D.57}$$

where the convergence follows from (D.52). As in the point-wise derivations, we can also show that (D.55) equals

$$\lim_{n\to\infty} \inf_{F\in\mathcal{F}} \mathbb{P}\left[(\theta_U - \hat{\theta}_U) - z_{1-\alpha}\frac{\hat{\sigma}_U}{\sqrt{n}} \leq (\delta_U - \delta_L)\pi\right] \tag{D.58}$$

$$\geq \lim_{n\to\infty} \inf_{F\in\mathcal{F}} \mathbb{P}\left[(\theta_U - \hat{\theta}_U) - z_{1-\alpha}\frac{\hat{\sigma}_U}{\sqrt{n}} \leq (\delta_U - \delta_L)\underline{\pi}\right] \to 1, \tag{D.59}$$

where the inequality used (D.50) and the convergence used (D.51). The case of $\theta^\star = \theta_U$ proceeds analogously, and these arguments also immediately imply that when $\theta^\star \in (\theta_L, \theta_U)$, then we have uniform convergence to unity. Thus, (D.13) converges at least to $1-\alpha$, as required.

E Observation Counts for Education IV/OLS Results

Table E.1: Observation Counts for Home Environment (Education Sample)

	Chicago			New York			Combined		
	$\mathbb{E}[Y\|E=0]$	OLS	IV	$\mathbb{E}[Y\|E=0]$	OLS	IV	$\mathbb{E}[Y\|E=0]$	OLS	IV
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Case school year:									
Not at pre-case address	16,150	45,435	45,435	141,882	210,186	210,186	158,032	255,621	255,621
Neighborhood poverty	21,166	60,459	60,459	155,281	229,437	229,437	176,447	289,896	289,896
Homelessness†	19,500	21,500	15,500	184,677	276,208	276,208	204,177	297,708	291,708
McKinney Vento	15,772	43,711	43,711						
Post-filing school year 1:									
Not at pre-case address	13,498	37,686	37,686	113,571	168,258	168,258	127,069	205,944	205,944
Number of moves	12,578	35,110	35,110	113,571	168,258	168,258	126,149	203,368	203,368
Neighborhood poverty	17,620	49,959	49,959	124,015	183,102	183,102	141,635	233,061	233,061
Homelessness†	19,500	26,000	19,500	171,174	254,870	254,870	190,674	280,870	274,370
McKinney Vento	16,834	46,872	46,872						
Post-filing school year 2:									
Not at pre-case address	11,073	30,949	30,949	87,349	129,205	129,205	98,422	160,154	160,154
Number of moves	8,963	24,599	24,599	87,349	129,205	129,205	96,312	153,804	153,804
Neighborhood poverty	14,665	41,567	41,567	95,061	140,269	140,269	109,726	181,836	181,836
Homelessness†				153,280	228,575	228,575			
McKinney Vento	17,808	49,720	49,720						

Notes: This table provides the observation counts for the "Home Environment" main IV/OLS results, as presented in Table 3. For each column and time period, the main table observation count reports the average of the counts reported in this table. †Observation counts for HMIS records are rounded in accordance with U.S. Census Bureau disclosure requirements and were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-P2476-R11514.

Table E.2: Observation Counts for School Attachment and Engagement (Education Sample)

	Chicago			New York			Combined		
	$\mathbb{E}[Y\|E=0]$	OLS	IV	$\mathbb{E}[Y\|E=0]$	OLS	IV	$\mathbb{E}[Y\|E=0]$	OLS	IV
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Case school year:									
Not at pre-case school	17,882	50,847	50,847	174,710	258,723	258,723	192,592	309,570	309,570
Percent absent	14,818	41,175	41,175	190,680	282,529	282,529	205,498	323,704	323,704
Chronic absent	14,818	41,175	41,175	190,680	282,529	282,529	205,498	323,704	323,704
Transferred out of school system	25,390	72,890	72,890	197,182	291,736	291,736	222,572	364,626	364,626
Post-filing school year 1:									
Not at pre-case school	14,054	39,932	39,932	134,775	198,810	198,810	148,829	238,742	238,742
Percent absent	13,435	37,193	37,193	172,639	254,219	254,219	186,074	291,412	291,412
Chronic absent	13,435	37,193	37,193	172,639	254,219	254,219	186,074	291,412	291,412
Retained	16,746	47,134	47,134	176,446	259,665	259,665	193,192	306,799	306,799
Transferred out of school system	24,676	71,143	71,143	197,182	291,736	291,736	221,858	362,879	362,879
Post-filing school year 2:									
Not at pre-case school	10,303	29,852	29,852	92,695	136,893	136,893	102,998	166,745	166,745
Percent absent	11,978	33,535	33,535	151,735	223,371	223,371	163,713	256,906	256,906
Chronic absent	11,978	33,535	33,535	151,735	223,371	223,371	163,713	256,906	256,906
Retained	14,132	40,199	40,199	153,345	225,533	225,533	167,477	265,732	265,732
Transferred out of school system	23,505	68,297	68,297	197,182	291,736	291,736	220,687	360,033	360,033

Notes: This table provides the observation counts for the "School Attachment and Engagement" main IV/OLS results, as presented in Table 5. For each column and time period, the main table observation count reports the average of the counts reported in this table.

Table E.3: Observation Counts for Elementary and Middle School Test Scores (Education Sample)

	Chicago			New York			Combined		
	$\mathbb{E}[Y\|E=0]$ (1)	OLS (2)	IV (3)	$\mathbb{E}[Y\|E=0]$ (4)	OLS (5)	IV (6)	$\mathbb{E}[Y\|E=0]$ (7)	OLS (8)	IV (9)
Case school year:									
Reading test score	9,408	27,302	27,302	93,371	139,092	139,092	102,779	166,394	166,394
Math test score	9,389	27,219	27,219	92,594	137,874	137,874	101,983	165,093	165,093
Missed test	9,917	28,866	28,866	98,766	147,101	147,101	108,683	175,967	175,967
Post-filing school year 1:									
Reading test score	8,477	24,493	24,493	83,045	123,687	123,687	91,522	148,180	148,180
Math test score	8,461	24,419	24,419	82,152	122,314	122,314	90,613	146,733	146,733
Missed test	8,928	25,888	25,888	93,941	139,907	139,907	102,869	165,795	165,795
Post-filing school year 2:									
Reading test score	8,055	23,738	23,738	71,626	107,328	107,328	79,681	131,066	131,066
Math test score	8,009	23,640	23,640	70,754	106,046	106,046	78,763	129,686	129,686
Missed test	8,466	24,982	24,982	87,831	131,403	131,403	96,297	156,385	156,385

Notes: This table provides the observation counts for the "Elementary School Test Scores" main IV/OLS results, as presented in Table 6. For each column and time period, the main table observation count reports the average of the counts reported in this table.

Table E.4: Observation Counts for High School Credit Accumulation and GPA (Education Sample)

	Chicago			New York			Combined		
	$\mathbb{E}[Y\|E=0]$ (1)	OLS (2)	IV (3)	$\mathbb{E}[Y\|E=0]$ (4)	OLS (5)	IV (6)	$\mathbb{E}[Y\|E=0]$ (7)	OLS (8)	IV (9)
Case school year:									
Credits	1,220	3,164	3,164	47,481	68,604	68,604	48,701	71,768	71,768
GPA	3,427	9,110	9,110						
Post-filing school year 1:									
Credits	1,195	3,142	3,142	51,807	74,312	74,312	53,002	77,454	77,454
GPA	3,368	8,966	8,966						
Post-filing school year 2:									
Credits	1,258	3,399	3,399	50,141	71,766	71,766	51,399	75,165	75,165
GPA	3,316	9,087	9,087						

Notes: This table provides the observation counts for the "High School Credits and GPA" main IV/OLS results, as presented in Table 7. For each column and time period, the main table observation count reports the average of the counts reported in this table.

Table E.5: Observation Counts for High School Graduation (Education Sample; Filing in Grades 6 to 12)

	Chicago			New York			Combined		
	$\mathbb{E}[Y\|E=0]$	OLS	IV	$\mathbb{E}[Y\|E=0]$	OLS	IV	$\mathbb{E}[Y\|E=0]$	OLS	IV
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Graduation	6,073	16,352	16,352	83,803	120,196	120,196	89,876	136,548	136,548
Graduation status not observed	9,183	25,569	25,569	95,597	138,709	138,709	104,780	164,278	164,278

Notes: This table provides the observation counts for the "High School Completion" main IV/OLS results, as presented in Table 8. For each column and time period, the main table observation count reports the average of the counts reported in this table.