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Do Nuisance Ordinances Increase Eviction Risk?†

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Criminal activity nuisance ordinances began to appear in cities throughout the United States in the 1980s but have grown increasingly prevalent during the past two decades. Proponents of nuisance ordinances tout these laws as a way for police to increase their presence by using landlords' eviction leverage as a means to discourage crime (Fais 2008, Buerger and Mazerolle 1998, Desmond and Valdez 2012). However, the quantitative impact of these laws on tenant evictions has not previously been measured.

This is an important public policy question because the current scale of evictions is unprecedented. Renter-occupied rates have grown steadily following the Great Recession, from 31.2 percent in 2006 to a 50-year high of 36.6 percent in 2016 (Cilluffo, Geiger, and Fry 2017), and evictions have increased proportionally. Nearly 1 percent of the country experiences an eviction event each year.[1] Moreover, there is growing evidence that evictions and forced moves impose significant social costs, including persistent increases in homelessness (Collinson and Reed 2018), decreased consumption and access to credit (Humphries et al. 2019), and worse mental and physical health (Collinson and Reed 2018, Currie and Tekin 2015, Desmond and Kimbro 2015).

This research examines the causal impact of nuisance ordinances on evictions by exploiting the growth in nuisance ordinances in Ohio that occurred in the past 15 years as well as newly available data on evictions. Using a city-level panel, we establish that municipalities that pass nuisance ordinances exhibit similar prelegislation trends in evictions and filings compared with cities without such ordinances. However, the ordinances lead to significant increases in both eviction filings and complete evictions after they are passed. Difference-in-differences estimates show that the ordinances cause an increase in eviction filing rates of approximately 16 percent of the sample mean and an increase in court-ordered evictions of 14 percent of the sample mean.

I. Background

Under criminal activity nuisance ordinances, a property can be designated as a nuisance when crime-related 911 calls from or on behalf of its residents exceed a given frequency within a set time frame; a common threshold stated in such ordinances is three or more calls in a 12-month period. The nuisance designation obligates the property owner to abate the nuisance activity, failure of which can result in substantial fines, property seizure, or even jail time. As documented in Desmond and Valdez (2012), Arnold and Slusser (2015), and Lepley and Mangiarelli (2019), rental properties are the prevailing target of criminal nuisance designations, and the affected property owners commonly abate the nuisance by serving tenants with an eviction notice.

Criminal nuisance laws are widely prevalent across the country, and the American Civil Liberties Union has challenged the constitutionality of these laws in cities throughout Illinois, New York, Ohio, and Missouri. Ohio offers a unique policy environment in which to examine the impact of nuisance ordinances because of its recent and concentrated policy changes. The first criminal activity nuisance ordinances were enacted in Ohio in 2004, and by 2016 more than 30 percent of renters in Ohio were subject to this type of ordinance. This allows us to observe

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[1] Desmond et al. (2018) shows that over 900,000 households (approximately 2.3 million individuals) were evicted through court order in 2016. However, these data do not include all municipalities in the United States, and they exclude informal evictions.

easier to just evict the tenant when a property received a nuisance designation

both pre- and postpolicy eviction outcomes in all of the cities that have passed an ordinance, as well as outcomes in nonordinance cities over the full time period.

II. Data

Our dataset combines annualized data on evictions between 2000 and 2016 with the records of all nuisance ordinances passed by cities in Ohio during the same period.

Eviction data are collected from the Eviction Lab at Princeton University (Desmond et al. 2018). The data are collected from formal eviction records via a variety of sources.[2] Eviction cases are matched to cities by using the address in the eviction court record. Filings include all the eviction cases filed in a city. Evictions include all the homes that receive an eviction judgment and are, by definition, a subset of filings. The data do not capture informal evictions, which Desmond (2016) estimates are two to three times as frequent as court-ordered evictions. The numbers of evictions and eviction filings are divided by the number of renter-occupied households in the city to calculate a rate. Desmond et al. (2018) also estimates the number of renter-occupied households from the 2000 and 2010 US Censuses and Esri Business Analyst 2016 and provides information on time-varying city characteristics, including the racial composition of the population, the poverty rate, and the fraction of homes that are rented.

Data on nuisance ordinances are obtained from Mead et al. (2017). Our final dataset includes an unbalanced panel of 246 cities over 17 years, starting in 2000 and ending in 2016.[3] Forty-four cities (18 percent of all cities in the sample) passed a nuisance ordinance at some point prior to 2016.

III. Estimation

We exploit variation in the adoption of nuisance ordinances across cities and over time to identify the causal impact of nuisance ordinances on evictions, using both an event-study and a difference-in-differences approach. We first estimate the following event-study model on evictions and eviction filings per 100 renter homes:

$$(1)\quad y_{ct} = \sum_{i=-4}^{4} \beta_i Nuisance_c \times I(t - t_c^* = i) + \delta_{0c} + \delta_{1c} t + \lambda_t + X_{ct}'\gamma + \epsilon_{ct},$$

where $Nuisance_c$ is a binary indicator that equals one if city c ever passes a nuisance ordinance, t_c^* is the year in which treated city c passes the ordinance, and $t - t_c^*$ is the year relative to the policy change and is set equal to -1 in all years for cities that never pass an ordinance; the sequence of variables $I(t - t_c^* = i)$ is a set of indicator variables for year t relative to the passage of the ordinance in city c, for which $i = -1$ is the omitted category. In practice, we include eight binary indicators for four to two years before the policy change and zero to four years after the policy change. The term β_i measures the policy impact in relative year i among cities that passed an ordinance, where $i = 0$ in the year the law is enacted, $i = 1$ one year after the law is passed, $i = 2$ two years after the law is passed, and so on. As shown in equation (1), the model controls for city fixed effects (δ_{0c}), year fixed effects (λ_t), time-varying city-level characteristics (X_{ct}'), and city-specific linear trends ($\delta_{1c} t$). Standard errors are clustered at the city level.

We also estimate the following difference-in-differences model on evictions and eviction filings per 100 renter homes:[4]

$$(2)\quad y_{ct} = \beta Nuisance_{ct} + \delta_c + \lambda_t + \epsilon_{ct}.$$

The policy variable of interest, $Nuisance_{ct}$, is a dummy variable that equals one if city c has an active criminal activity nuisance ordinance in year t. All specifications include city and year fixed effects, and standard errors are clustered at the city level.

The identifying assumption of the difference-in-differences model is that the passage of

[2] We refer the reader to https://evictionlab.org/ for detailed documentation.

[3] The sample includes all statutory and charter cities in Ohio.

[4] Goodman-Bacon (2018) shows that a difference-in-differences model with variation in treatment timing, also called a two-way fixed effects model, can give biased estimates when the treatment effect changes over time. In these cases, an event-study model like the one presented in equation (1) is more appropriate.

nuisance ordinances is not correlated with time-varying unobserved characteristics of cities that may also affect evictions. Although this assumption is inherently untestable, we run a number of checks to assess its plausibility. First, we control for time-varying city characteristics that may predict evictions, including the percentage of population that is white, the fraction of homes that are rented, and the poverty rate. Second, we include city-specific, linear time trends to account for any ongoing, secular trends in individual cities. Third, the event study allows us to check for any differential trends in outcome variables in the treatment cities relative to control cities up to four years prior to the passage of the ordinances.

IV. Results

Figure 1 illustrates the results of the event study for evictions and eviction filings: the graphs plot the series of β_i from equation (1), where the coefficient β_{-1} is normalized to zero. Trends in both outcomes appear reasonably similar in treatment and control cities prior to the policy change, providing support for the difference-in-differences identification.

For years following the policy change, Figure 1 shows an increase in the eviction rate in cities that pass an ordinance relative to cities that do not pass an ordinance. In each of the first three years after the ordinance, the estimated effect amounts to about 0.6 more evictions per 100 renter homes, which is sizable compared with the prereform mean of 3 evictions per 100 renter homes in cities that pass an ordinance. The effect slightly decreases in magnitude and becomes statistically insignificant in the fourth year after the policy change. We observe a similar increase in the eviction filing rate starting in the year after the reform, which persists through the fourth year following the law. The estimated effect amounts to 1 additional eviction filing per 100 renter homes, against a prereform mean of 6.5.

Table 1 reports the difference-in-differences estimates. Columns 1 to 3 display the results for the eviction rate. Passing a nuisance ordinance increases the eviction rate by 0.54, and the effect is statistically significant at the 1 percent level. The estimated effect is equivalent to a 20 percent increase relative to the overall sample mean. Adding time-varying city characteristics

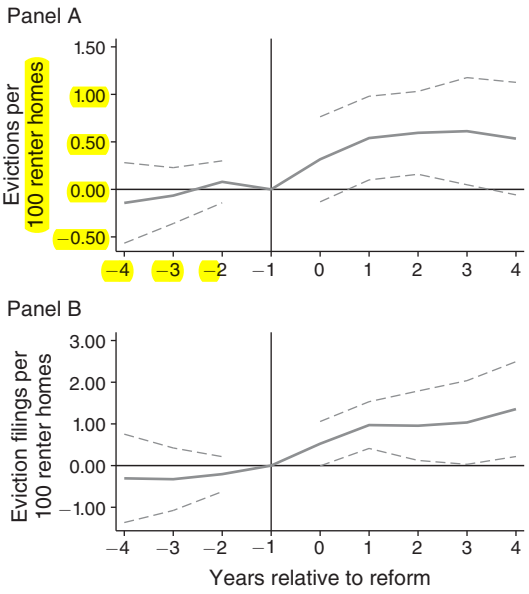

Figure 1. Event Study of Evictions and Filings

Notes: The graphs plot the estimated coefficients (and 95 percent confidence intervals) obtained from an event study of the effect of criminal activity nuisance ordinances on evictions (panel A) and eviction filings (panel B). The regression model includes poverty rate, renter-occupied rate, fraction white, city fixed effects, year fixed effects, and city-specific linear time trends. Year −1 is the omitted category. Standard errors are clustered at the city level.

reduces the coefficient estimate by 28 percent (column 2), suggesting that cities that pass an ordinance are experiencing contemporaneous changes in the racial and economic composition of the population that partially confound the estimates in column 1. The estimated coefficient is statistically significant at the 5 percent level and still meaningful in magnitude: passing a nuisance ordinance increases the number of evictions per 100 renter homes by 0.39, which is equivalent to 14.5 percent of the sample mean. Controlling for city-specific linear trends decreases the coefficient only slightly, although the estimate becomes less precise (column 3).

Columns 4 to 6 report the results for the eviction filing rate. A nuisance ordinance increases the number of filings per 100 renter homes by 0.88, which amounts to 16.5 percent of the sample mean. The effect is statistically significant at the 1 percent level (column 4). The coefficient estimate falls to 0.52 when time-varying

Table 1—Impact of Nuisance Ordinances on Evictions and Filings

	Evictions (mean = 2.669)			Eviction filings (mean = 5.328)		
	(1)	(2)	(3)	(4)	(5)	(6)
Nuisance ordinance	0.541	0.388	0.372	0.878	0.518	0.866
	(0.176)	(0.175)	(0.219)	(0.299)	(0.286)	(0.294)
	[0.002]	[0.028]	[0.091]	[0.004]	[0.071]	[0.003]
Observations	3,942	3,942	3,942	3,942	3,942	3,942
Number of clusters	246	246	246	246	246	246
Controls		X	X		X	X
City linear trends			X			X

Notes: Evictions and eviction filings are both measured as counts per 100 renter homes. Robust standard errors clustered at the city level are in parentheses, and *p*-values are displayed in square brackets. All regressions control for city and year fixed effects. Controls include poverty rate, renter-occupied rate, and fraction white.

city characteristics are added to the regression (column 5), but it increases again to 0.87 when city-specific linear trends are included (column 6). All in all, the difference-in-differences results corroborate the positive effect of nuisance ordinances on evictions and eviction filings seen in the event study results.

V. Discussion and Conclusion

This analysis shows that nuisance ordinances increase evictions by 14 percent, and these results are robust to conservative specifications. There are several concerning policy implications of these results. First, these laws could produce a chilling effect: tenants under a nuisance ordinance may be reluctant to report criminal activity or call for emergency assistance when it is needed. Second, perpetrators of criminal activity may exploit their victims' reluctance to call 911 and behave more aggressively with impunity. Third, the most economically vulnerable tenants are also the individuals most likely to be affected by the ordinances and the threat of eviction. In particular, low-income women, minorities, or undocumented migrants may underreport domestic violence or harassment when they are subject to a nuisance ordinance. More study is needed to determine the consequences of these laws for crime reporting and crime incidence.

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