Retaliatory Evictions: Complaints and Filing Dynamics

Philly Evictions Project

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1 Overview

This document summarizes the retaliatory eviction analysis from `r/retaliatory-evictions.r`. The script investigates whether tenant complaints (code enforcement, maintenance, etc.) are associated with subsequent eviction filings — a pattern consistent with retaliatory eviction.

Unit of analysis: Building (PID) × period (month or quarter) panel.

Sample: Rental buildings from the analytic sample, 2007–2024, with a pre-COVID subsample ($\leq$ 2019).

Key data inputs:

- `building_data_rental_month.parquet` — monthly complaint and violation counts by building
- `analytic_sample.csv` — PID universe filter
- `evictions_clean` + `evict_address_xwalk` — filing-level eviction data aggregated to PID × period
- `bldg_panel_blp` — tenant composition (race/gender from InfoUSA)

2 Empirical Strategy

2.1 Complaint Definitions

Complaints are categorized into three types:

- **Any complaint:** `total_complaints > 0`
- **Severe complaints:** Heat, fire, drainage, property maintenance (categories most likely to indicate habitability concerns)
- **Non-severe complaints:** Building, emergency service, zoning, trash/weeds, license/business, program initiative, vacant property

2.2 Model 1: Distributed Lag

For each complaint type $c \in \{\text{any}, \text{severe}, \text{non-severe}\}$:

$$\text{filed\_eviction}_{it} = \sum_{k=-h}^{h} \beta_k \cdot \mathbb{1}[\text{complaint}_{i,t+k}] + \alpha_i + \gamma_t + \varepsilon_{it}$$

where h is the horizon (default 12 months or 4 quarters), α_i are building FE, and γ_t are period FE. Standard errors clustered by PID.

2.3 Model 2: Local Projections DiD (LP-DiD)

Uses the `lpdid` package (Girardi) to estimate dynamic treatment effects of complaint filing on eviction filings, with:

- Window selection: prefers \$±\$24 periods, falls back to \$±\$12 if treated-unit retention drops below 60%
- Non-absorbing treatment (complaints can recur)
- Clustered by PID

2.4 Model 3: Same-Period Retaliation

Baseline:

$$\text{filed\_eviction}_{it} = \beta \cdot \text{filed\_complaint}_{it} + \alpha_i + \gamma_t + \varepsilon_{it}$$

Tenant-composition augmented (tests whether retaliation varies with building demographics):

$$\text{filed\_eviction}_{it} = \beta_0 \cdot C_{it} + \beta_1 \cdot C_{it} \times \widetilde{\text{Black}}_i + \beta_2 \cdot C_{it} \times \widetilde{\text{Female}}_i + \beta_3 \cdot C_{it} \times \widetilde{\text{Black} \times \text{Female}}_i + \beta_4 \cdot C_{it} \times \widetilde{\text{Coverage}}_i + \delta \cdot M_i + \alpha_i$$

where $\tilde{\cdot}$ denotes demeaned tenant composition and M_i flags missing composition.

2.5 Model 4: Retaliatory Targeting

Among building-periods with an eviction filing, is the eviction more likely to be retaliatory (complaint nearby) in buildings with more Black/female tenants?

$$\text{retaliatory}_{it} = \beta_1 \cdot \widetilde{\text{Black}}_i + \beta_2 \cdot \widetilde{\text{Female}}_i + \beta_3 \cdot \widetilde{\text{Black} \times \text{Female}}_i + \delta M_i + \alpha_{\text{geo}} + \gamma_t + \varepsilon_{it}$$

Sample restricted to eviction-filing periods. Estimated with both tract and block group FE, clustered accordingly.

2.6 Model 5: Complaint Suppression

Conditional on maintenance activity (permits) and building conditions (violations), do buildings with more Black/female tenants file fewer complaints?

$$\text{filed\_complaint}_{it} = \beta_1 \cdot \widetilde{\text{Black}}_i + \gamma_1 \cdot \text{Permits}_{it} + \gamma_2 \cdot \text{Violations}_{it} + \delta M_i + \alpha_{\text{geo}} + \gamma_t + \varepsilon_{it}$$

Estimated with tract and block group FE on the full panel.

2.7 Bandwidth Analysis

Computes the share of eviction filings that occur within $b = 1, \ldots, B$ periods of a complaint, decomposed into:

- Same-period filings
- Within-bandwidth (but not same-period)
- Non-retaliatory (no nearby complaint)

3 Results

3.1 Bandwidth Summary

What share of eviction filings occur near a complaint?

Table 1: Share of eviction filings near a complaint, by bandwidth

Bandwidth (months)	Eviction rows	Same period	Within BW	Plausible only	Non-retaliatory
1	211,624	6.7%	15.2%	8.5%	84.8%
2	211,624	6.7%	20.7%	13.9%	79.3%
3	211,624	6.7%	24.6%	17.9%	75.4%
4	211,624	6.7%	27.9%	21.2%	72.1%
5	211,624	6.7%	30.5%	23.8%	69.5%
6	211,624	6.7%	32.8%	26.1%	67.2%

3.2 Distributed Lag Estimates

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Distributed lag plot not found.
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Table 2: Distributed lag coefficients at $t-2$ through $t+3$

sample	stem	$t-2$	$t-1$	t	$t+1$	$t+2$	$t+3$
full	complaint	0.0084	0.0147	0.0243	0.0124	0.0043	0.0023
full	non_severe	0.0015	0.0027	0.0039	0.0024	0.0027	0.0021
full	severe	0.0160	0.0268	0.0434	0.0222	0.0068	0.0030
pre	complaint	0.0097	0.0184	0.0308	0.0154	0.0055	0.0033
pre	non_severe	0.0015	0.0032	0.0045	0.0028	0.0031	0.0026
pre	severe	0.0193	0.0345	0.0568	0.0286	0.0093	0.0046

3.3 Same-Period Retaliation with Tenant Composition

Dependent Variable:	filed_eviction	
Model:	(1)	(2)
Variables		
filed_complaint	0.026***	0.026***
	(0.0004)	(0.0004)
tenant_comp_missing		-0.0009***
		(6.94 × 10⁻⁷)
filed_complaint × tc_black_c		0.018***
		(0.002)
filed_complaint × tc_female_c		0.002
		(0.002)
filed_complaint × tc_black_female_c		-0.0003
		(0.003)
filed_complaint × tc_cov_c		0.017***
		(0.002)
Fixed-effects		
period_fe	Yes	Yes
PID	Yes	Yes
Fit statistics		
Observations	24,526,152	24,526,152
R^2	0.03306	0.09312
Within R^2	0.00691	0.00097

Clustered (PID) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Dependent Variable:	filed_eviction	
Model:	(1)	(2)
Variables		
filed_severe	0.046***	0.045***
	(0.0008)	(0.0008)
tenant_comp_missing		-0.0008***
		(6.92 × 10⁻⁷)
filed_severe × tc_black_c		0.020***
		(0.004)
filed_severe × tc_female_c		0.003
		(0.004)
filed_severe × tc_black_female_c		-0.008
		(0.006)
filed_severe × tc_cov_c		0.030***
		(0.003)
Fixed-effects		
period_fe	Yes	Yes
PID	Yes	Yes
Fit statistics		
Observations	24,526,152	24,526,152
R^2	0.01063	0.09368
Within R^2	0.00153	0.00159

Clustered (PID) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Dependent Variable:	filed_eviction	
Model:	(1)	(2)
Variables		
filed_non_severe	0.004***	0.004***
	(0.0004)	(0.0004)
tenant_comp_missing		-0.0009***
		(6.98 × 10⁻⁷)
filed_non_severe × tc_black_c		-0.004*
		(0.002)
filed_non_severe × tc_female_c		0.0001
		(0.002)
filed_non_severe × tc_black_female_c		0.003
		(0.003)
filed_non_severe × tc_cov_c		-0.0004
		(0.002)
Fixed-effects		
period_fe	Yes	Yes
PID	Yes	Yes
Fit statistics		
Observations	24,526,152	24,526,152
R^2	0.09225	0.09228
Within R^2	1.09×10^{-5}	2.16×10^{-5}

Clustered (PID) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Dependent Variable:	filed_eviction	
Model:	(1)	(2)
Variables		
filed_complaint	0.033***	0.032***
	(0.0005)	(0.0005)
tenant_comp_missing		-0.001***
		(8.31 × 10⁻⁷)
filed_complaint × tc_black_c		0.023***
		(0.003)
filed_complaint × tc_female_c		0.005*
		(0.002)
filed_complaint × tc_black_female_c		-0.004
		(0.004)
filed_complaint × tc_cov_c		-0.006**
		(0.003)
Fixed-effects		
period_fe	Yes	Yes
PID	Yes	Yes
Fit statistics		
Observations	17,713,332	17,713,332
R^2	0.10546	0.10551
Within R^2	0.00125	0.00131

Clustered (PID) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Dependent Variable:	filed_eviction	
Model:	(1)	(2)
Variables		
filed_severe	0.059***	0.058***
	(0.0009)	(0.0010)
tenant_comp_missing		-0.0016***
		(8.28 × 10⁻⁷)
filed_severe × tc_black_c		0.021***
		(0.005)
filed_severe × tc_female_c		0.007
		(0.005)
filed_severe × tc_black_female_c		-0.012*
		(0.007)
filed_severe × tc_cov_c		-0.010**
		(0.005)
Fixed-effects		
period_fe	Yes	Yes
PID	Yes	Yes
Fit statistics		
Observations	17,713,332	17,713,332
R^2	0.10827	0.10830
Within R^2	0.00216	0.00219

Clustered (PID) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Dependent Variable:	filed_eviction	
Model:	(1)	(2)
Variables		
filed_non_severe	0.005***	0.005***
	(0.0004)	(0.0004)
tenant_comp_missing		-0.001***
		(8.36 × 10⁻⁵)
filed_non_severe × tc_black_c		-0.003
		(0.002)
filed_non_severe × tc_female_c		-0.0006
		(0.002)
filed_non_severe × tc_black_female_c		0.002
		(0.004)
filed_non_severe × tc_cov_c		-0.003
		(0.003)
Fixed-effects		
period_fe	Yes	Yes
PID	Yes	Yes
Fit statistics		
Observations	17,713,332	17,713,332
R^2	0.10435	0.10436
Within R^2	1.39×10^{-5}	2.55×10^{-5}

Clustered (PID) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

3.4 Tenant Composition Interactions

Do buildings with higher shares of Black tenants or female-headed households face more retaliatory eviction filings after a complaint? The interaction terms below test this: a positive coefficient on `Complaint × % Black` means that a complaint in a building with a higher Black tenant share is associated with a larger increase in eviction filings.

Table 3: Same-period retaliation: complaint main effects and tenant composition interactions

Sample	Complaint type	Term	Estimate	SE	p
Full	Any	Complaint (main effect)	0.0260	0.0004	0.000
Full	Any	Complaint x % Black	0.0180	0.0024	0.000
Full	Any	Complaint x % Female	0.0023	0.0020	0.270
Full	Any	Complaint x % Black Female	-0.0003	0.0035	0.928
Full	Any	Complaint x Demog Coverage	0.0165	0.0019	0.000
Full	Severe	Complaint (main effect)	0.0453	0.0008	0.000
Full	Severe	Complaint x % Black	0.0199	0.0038	0.000
Full	Severe	Complaint x % Female	0.0031	0.0039	0.425
Full	Severe	Complaint x % Black Female	-0.0084	0.0056	0.132
Full	Severe	Complaint x Demog Coverage	0.0303	0.0030	0.000
Full	Non-severe	Complaint (main effect)	0.0043	0.0004	0.000
Full	Non-severe	Complaint x % Black	-0.0037	0.0021	0.075
Full	Non-severe	Complaint x % Female	0.0001	0.0018	0.934
Full	Non-severe	Complaint x % Black Female	0.0027	0.0031	0.380
Full	Non-severe	Complaint x Demog Coverage	-0.0004	0.0018	0.808
Pre-COVID	Any	Complaint (main effect)	0.0323	0.0005	0.000
Pre-COVID	Any	Complaint x % Black	0.0234	0.0030	0.000
Pre-COVID	Any	Complaint x % Female	0.0046	0.0024	0.054
Pre-COVID	Any	Complaint x % Black Female	-0.0044	0.0042	0.295
Pre-COVID	Any	Complaint x Demog Coverage	-0.0061	0.0031	0.046
Pre-COVID	Severe	Complaint (main effect)	0.0579	0.0010	0.000
Pre-COVID	Severe	Complaint x % Black	0.0215	0.0049	0.000
Pre-COVID	Severe	Complaint x % Female	0.0066	0.0046	0.155
Pre-COVID	Severe	Complaint x % Black Female	-0.0124	0.0069	0.072
Pre-COVID	Severe	Complaint x Demog Coverage	-0.0104	0.0051	0.040
Pre-COVID	Non-severe	Complaint (main effect)	0.0049	0.0004	0.000
Pre-COVID	Non-severe	Complaint x % Black	-0.0029	0.0025	0.247
Pre-COVID	Non-severe	Complaint x % Female	-0.0006	0.0019	0.747
Pre-COVID	Non-severe	Complaint x % Black Female	0.0017	0.0036	0.629
Pre-COVID	Non-severe	Complaint x Demog Coverage	-0.0027	0.0026	0.308

3.5 Tract FE Specification (Cross-Building Variation)

The main models above use building (PID) fixed effects, identifying off *within-building* time variation in complaints and evictions. The tract FE models below replace PID FE with census tract FE, also exploiting *cross-building* variation within neighborhoods. Comparison of the two identifies whether the complaint–eviction relationship is driven by within-building dynamics or cross-sectional sorting.

Dependent Variable:	filed_eviction	
Model:	(1)	(2)
Variables		
filed_complaint	0.044***	0.043***
	(0.002)	(0.002)
tenant_comp_missing		-0.0004*
		(0.0002)
filed_complaint × tc_black_c		0.021***
		(0.003)
filed_complaint × tc_female_c		0.009***
		(0.002)
filed_complaint × tc_black_female_c		-0.002
		(0.004)
filed_complaint × tc_cov_c		0.011***
		(0.002)
Fixed-effects		
period_fe	Yes	Yes
GEOID	Yes	Yes
Fit statistics		
Observations	24,526,152	24,526,152
R^2	0.01305	0.01311
Within R^2	0.00235	0.00241

Clustered (GEOID) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Dependent Variable:	filed_eviction	
Model:	(1)	(2)
Variables		
filed_severe	0.075***	0.075***
	(0.002)	(0.002)
tenant_comp_missing		-0.0003
		(0.0002)
filed_severe × tc_black_c		0.016***
		(0.005)
filed_severe × tc_female_c		0.013***
		(0.004)
filed_severe × tc_black_female_c		-0.012**
		(0.006)
filed_severe × tc_cov_c		0.022***
		(0.003)
Fixed-effects		
period_fe	Yes	Yes
GEOID	Yes	Yes
Fit statistics		
Observations	24,526,152	24,526,152
R^2	0.01458	0.01460
Within R^2	0.00390	0.00392

Clustered (GEOID) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Dependent Variable:	filed_eviction	
Model:	(1)	(2)
Variables		
filed_non_severe	0.007***	0.007***
	(0.0006)	(0.0006)
tenant_comp_missing		-0.0003
		(0.0002)
filed_non_severe × tc_black_c		-0.003
		(0.002)
filed_non_severe × tc_female_c		0.003
		(0.002)
filed_non_severe × tc_black_female_c		0.002
		(0.003)
filed_non_severe × tc_cov_c		-0.002
		(0.002)
Fixed-effects		
period_fe	Yes	Yes
GEOID	Yes	Yes
Fit statistics		
Observations	24,526,152	24,526,152
R^2	0.01075	0.01076
Within R^2	2.98×10^{-5}	3.21×10^{-5}

Clustered (GEOID) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Dependent Variable:	filed_eviction	
Model:	(1)	(2)
Variables		
filed_complaint	0.049***	0.049***
	(0.002)	(0.002)
tenant_comp_missing		-0.0004*
		(0.0002)
filed_complaint × tc_black_c		0.026***
		(0.004)
filed_complaint × tc_female_c		0.012***
		(0.003)
filed_complaint × tc_black_female_c		-0.005
		(0.005)
filed_complaint × tc_cov_c		-0.009**
		(0.004)
Fixed-effects		
period_fe	Yes	Yes
GEOID	Yes	Yes
Fit statistics		
Observations	17,713,332	17,713,332
R^2	0.01319	0.01326
Within R^2	0.00264	0.00273

Clustered (GEOID) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Dependent Variable:	filed_eviction	
Model:	(1)	(2)
Variables		
filed_severe	0.088***	0.088***
	(0.002)	(0.002)
tenant_comp_missing		-0.0003
		(0.0002)
filed_severe × tc_black_c		0.015**
		(0.006)
filed_severe × tc_female_c		0.016***
		(0.005)
filed_severe × tc_black_female_c		-0.015**
		(0.007)
filed_severe × tc_cov_c		-0.016***
		(0.006)
Fixed-effects		
period_fe	Yes	Yes
GEOID	Yes	Yes
Fit statistics		
Observations	17,713,332	17,713,332
R^2	0.01503	0.01505
Within R^2	0.00450	0.00452

Clustered (GEOID) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Dependent Variable:	filed_eviction	
Model:	(1)	(2)
Variables		
filed_non_severe	0.008***	0.008***
	(0.0007)	(0.0007)
tenant_comp_missing		-0.0003
		(0.0002)
filed_non_severe × tc_black_c		-0.003
		(0.002)
filed_non_severe × tc_female_c		0.003
		(0.002)
filed_non_severe × tc_black_female_c		0.0009
		(0.004)
filed_non_severe × tc_cov_c		-0.003
		(0.003)
Fixed-effects		
period_fe	Yes	Yes
GEOID	Yes	Yes
Fit statistics		
Observations	17,713,332	17,713,332
R^2	0.01063	0.01061
Within R^2	3.42×10^{-5}	3.49×10^{-5}

Clustered (GEOID) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table 4: Tract FE: same-period retaliation with tenant composition interactions

Sample	Complaint type	Term	Estimate	SE	p
Full	Any	Complaint (main effect)	0.0432	0.0016	0.000
Full	Any	Complaint x % Black	0.0212	0.0031	0.000
Full	Any	Complaint x % Female	0.0094	0.0024	0.000
Full	Any	Complaint x % Black Female	-0.0016	0.0037	0.669
Full	Any	Complaint x Demog Coverage	0.0107	0.0021	0.000
Full	Severe	Complaint (main effect)	0.0750	0.0022	0.000
Full	Severe	Complaint x % Black	0.0159	0.0051	0.002
Full	Severe	Complaint x % Female	0.0135	0.0044	0.002
Full	Severe	Complaint x % Black Female	-0.0122	0.0060	0.043
Full	Severe	Complaint x Demog Coverage	0.0221	0.0033	0.000
Full	Non-severe	Complaint (main effect)	0.0073	0.0006	0.000
Full	Non-severe	Complaint x % Black	-0.0029	0.0022	0.178
Full	Non-severe	Complaint x % Female	0.0025	0.0017	0.139
Full	Non-severe	Complaint x % Black Female	0.0018	0.0031	0.564
Full	Non-severe	Complaint x Demog Coverage	-0.0015	0.0019	0.438
Pre-COVID	Any	Complaint (main effect)	0.0489	0.0018	0.000
Pre-COVID	Any	Complaint x % Black	0.0259	0.0038	0.000
Pre-COVID	Any	Complaint x % Female	0.0117	0.0027	0.000
Pre-COVID	Any	Complaint x % Black Female	-0.0048	0.0045	0.283
Pre-COVID	Any	Complaint x Demog Coverage	-0.0085	0.0037	0.021
Pre-COVID	Severe	Complaint (main effect)	0.0878	0.0023	0.000
Pre-COVID	Severe	Complaint x % Black	0.0153	0.0063	0.016
Pre-COVID	Severe	Complaint x % Female	0.0163	0.0052	0.002
Pre-COVID	Severe	Complaint x % Black Female	-0.0147	0.0074	0.046
Pre-COVID	Severe	Complaint x Demog Coverage	-0.0158	0.0058	0.006
Pre-COVID	Non-severe	Complaint (main effect)	0.0080	0.0007	0.000
Pre-COVID	Non-severe	Complaint x % Black	-0.0026	0.0026	0.322
Pre-COVID	Non-severe	Complaint x % Female	0.0025	0.0019	0.182
Pre-COVID	Non-severe	Complaint x % Black Female	0.0009	0.0037	0.799
Pre-COVID	Non-severe	Complaint x Demog Coverage	-0.0026	0.0028	0.355

3.6 Retaliatory Targeting by Tenant Demographics

Among all eviction filings, are the *retaliatory* ones disproportionately concentrated in buildings with more Black or female tenants? This model conditions on **having an eviction filing** and asks whether the probability that it is retaliatory (complaint filed nearby) is higher in buildings with certain demographic compositions.

$$\text{retaliatory}_{it} = \beta_1 \cdot \widetilde{\text{Black}}_i + \beta_2 \cdot \widetilde{\text{Female}}_i + \beta_3 \cdot \widetilde{\text{Black} \times \text{Female}}_i + \beta_4 \cdot \widetilde{\text{Coverage}}_i + \delta M_i + \alpha_{\text{geo}} + \gamma_t + \varepsilon_{it}$$

Sample: Building-periods with at least one eviction filing. **Outcome:** Whether a complaint was filed in the same period ("same") or within $\pm B$ periods ("bw"). **FE:** Tract or block group.

A positive β_1 means that, among buildings filing evictions, those with more Black tenants are more likely to be retaliating against a complaint — i.e., retaliatory eviction is disproportionately targeted at Black-occupied buildings.

Dependent Variable:	retaliatory_same		Dependent Variable:	retaliatory_same		Dependent Variable:	retaliatory_bw		Dependent Variable:	retaliatory_bw	
	Tract FE	BG FE		Tract FE	BG FE		Tract FE	BG FE		Tract FE	BG FE
Model:	(1)	(2)	Model:	(1)	(2)	Model:	(1)	(2)	Model:	(1)	(2)
Variables			*Variables*			*Variables*			*Variables*		
tc_black_c	-0.0025	-0.0032	tc_black_c	-0.0045	-0.0061	tc_black_c	-0.0166	-0.0193*	tc_black_c	-0.0165	-0.0238**
	(0.0043)	(0.0042)		(0.0045)	(0.0046)		(0.0125)	(0.0111)		(0.0131)	(0.0118)
tc_female_c	0.0007	3.88×10^{-5}	tc_female_c	0.0008	0.0002	tc_female_c	0.0073	0.0039	tc_female_c	0.0071	0.0033
	(0.0033)	(0.0033)		(0.0037)	(0.0036)		(0.0088)	(0.0086)		(0.0091)	(0.0094)
tc_black_female_c	-0.0059	-0.0046	tc_black_female_c	-0.0076	-0.0059	tc_black_female_c	-0.0046	5.33×10^{-5}	tc_black_female_c	-0.0090	-0.0026
	(0.0044)	(0.0046)		(0.0049)	(0.0051)		(0.0114)	(0.0108)		(0.0116)	(0.0116)
tc_cov_c	-0.0070**	-0.0079**	tc_cov_c	-0.0042	-0.0052	tc_cov_c	-0.0243**	-0.0260***	tc_cov_c	-0.0215**	-0.0258***
	(0.0034)	(0.0033)		(0.0038)	(0.0036)		(0.0096)	(0.0085)		(0.0106)	(0.0095)
tenant_comp_missing	0.0032	0.0018	tenant_comp_missing	0.0037	0.0029	tenant_comp_missing	0.0104	0.0060	tenant_comp_missing	0.0131	0.0077
	(0.0022)	(0.0020)		(0.0023)	(0.0021)		(0.0084)	(0.0064)		(0.0089)	(0.0069)
Fixed-effects			*Fixed-effects*			*Fixed-effects*			*Fixed-effects*		
period_fe	Yes	Yes	period_fe	Yes	Yes	period_fe	Yes	Yes	period_fe	Yes	Yes
census_tract	Yes		census_tract	Yes		census_tract	Yes		census_tract	Yes	
GEOID		Yes	GEOID		Yes	GEOID		Yes	GEOID		Yes
Fit statistics			*Fit statistics*			*Fit statistics*			*Fit statistics*		
Observations	211,622	211,618	Observations	175,049	175,044	Observations	211,622	211,618	Observations	175,049	175,044
R^2	0.01847	0.03179	R^2	0.01521	0.02677	R^2	0.06936	0.10722	R^2	0.06762	0.10556
Within R^2	0.00014	0.00010	Within R^2	0.00021	0.00017	Within R^2	0.00039	0.00028	Within R^2	0.00052	0.00041
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*			*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*			*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*			*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*		

Table 5: Period-level targeting: among eviction-periods, is retaliation more likely in Black/female buildings?

Sample	Outcome	FE	Term	Estimate	SE	p
Full	Same period	Tract	% Black	-0.0025	0.0043	0.558
Full	Same period	Tract	% Female	0.0007	0.0033	0.835
Full	Same period	Tract	% Black Female	-0.0059	0.0044	0.178
Full	Same period	Tract	Demog Coverage	-0.0070	0.0034	0.044
Full	Same period	Block Group	% Black	-0.0032	0.0042	0.449
Full	Same period	Block Group	% Female	0.0000	0.0033	0.991
Full	Same period	Block Group	% Black Female	-0.0046	0.0046	0.317
Full	Same period	Block Group	Demog Coverage	-0.0079	0.0033	0.018
Pre-COVID	Same period	Tract	% Black	-0.0045	0.0045	0.315
Pre-COVID	Same period	Tract	% Female	0.0008	0.0037	0.838
Pre-COVID	Same period	Tract	% Black Female	-0.0076	0.0049	0.127
Pre-COVID	Same period	Tract	Demog Coverage	-0.0042	0.0038	0.272
Pre-COVID	Same period	Block Group	% Black	-0.0061	0.0046	0.185
Pre-COVID	Same period	Block Group	% Female	0.0002	0.0036	0.952
Pre-COVID	Same period	Block Group	% Black Female	-0.0059	0.0051	0.245

Pre-COVID	Same period	Block Group	Demog Coverage	-0.0052	0.0036	0.148
Full	Within BW	Tract	% Black	-0.0166	0.0125	0.185
Full	Within BW	Tract	% Female	0.0073	0.0088	0.406
Full	Within BW	Tract	% Black Female	-0.0046	0.0114	0.689
Full	Within BW	Tract	Demog Coverage	-0.0243	0.0096	0.012
Full	Within BW	Block Group	% Black	-0.0193	0.0110	0.081
Full	Within BW	Block Group	% Female	0.0039	0.0086	0.652
Full	Within BW	Block Group	% Black Female	0.0001	0.0108	0.996
Full	Within BW	Block Group	Demog Coverage	-0.0260	0.0085	0.002
Pre-COVID	Within BW	Tract	% Black	-0.0165	0.0131	0.208
Pre-COVID	Within BW	Tract	% Female	0.0071	0.0091	0.436
Pre-COVID	Within BW	Tract	% Black Female	-0.0090	0.0116	0.440
Pre-COVID	Within BW	Tract	Demog Coverage	-0.0215	0.0105	0.043
Pre-COVID	Within BW	Block Group	% Black	-0.0238	0.0118	0.044
Pre-COVID	Within BW	Block Group	% Female	0.0033	0.0094	0.724
Pre-COVID	Within BW	Block Group	% Black Female	-0.0026	0.0116	0.822
Pre-COVID	Within BW	Block Group	Demog Coverage	-0.0258	0.0095	0.006

3.7 Building-Year Retaliatory Share

The period-level model above treats each month as a separate observation. An alternative aggregates to the **building** × **year** level: for each PID-year with at least one eviction, what share of eviction-months are retaliatory? This is regressed on tenant demographics and building observables (log area, log market value) with FE for unit count bin, building type, construction decade, stories bin, year, and tract/BG.

$$\text{share\_retaliatory}_{iy} = \beta_1 \cdot \widetilde{\text{Black}}_i + \beta_2 \cdot \widetilde{\text{Female}}_i + \delta' X_i + \alpha_{\text{geo}} + \gamma_y + \phi_b + \varepsilon_{iy}$$

Sample: PID-years with ≥ 1 eviction filing. **FE:** Year + tract/BG + building type + unit bin + decade built + stories bin. **Controls:** log(total area), log(market value).

Dependent Variable:	share_retaliatory_same		Dependent Variable:	share_retaliatory_same		Dependent Variable:	share_retaliatory_bw		Dependent Variable:	share_retaliatory_bw	
	Tract FE	BG FE		Tract FE	BG FE		Tract FE	BG FE		Tract FE	BG FE
Model:	(1)	(2)	Model:	(1)	(2)	Model:	(1)	(2)	Model:	(1)	(2)
Variables			*Variables*			*Variables*			*Variables*		
tc_black_c	0.0045	0.0027	tc_black_c	0.0014	-0.0030	tc_black_c	-0.0088	-0.0111	tc_black_c	-0.0207	-0.0289**
	(0.0057)	(0.0059)		(0.0079)	(0.0082)		(0.0118)	(0.0114)		(0.0138)	(0.0141)
tc_female_c	0.0048	0.0040	tc_female_c	0.0056	0.0040	tc_female_c	-0.0016	-0.0058	tc_female_c	-0.0074	-0.0159
	(0.0058)	(0.0057)		(0.0073)	(0.0072)		(0.0116)	(0.0114)		(0.0139)	(0.0143)
tc_black_female_c	-0.0169**	-0.0162**	tc_black_female_c	-0.0224**	-0.0204**	tc_black_female_c	0.0071	0.0123	tc_black_female_c	0.0130	0.0221
	(0.0073)	(0.0074)		(0.0097)	(0.0098)		(0.0152)	(0.0148)		(0.0186)	(0.0187)
tc_cov_c	-0.0076	-0.0083	tc_cov_c	-0.0068	-0.0092	tc_cov_c	-0.0172	-0.0163	tc_cov_c	-0.0239*	-0.0254*
	(0.0054)	(0.0056)		(0.0077)	(0.0076)		(0.0110)	(0.0110)		(0.0143)	(0.0141)
tenant_comp_missing	0.0004	-0.0007	tenant_comp_missing	0.0005	-0.0013	tenant_comp_missing	0.0020	0.0023	tenant_comp_missing	-0.0004	-0.0021
	(0.0023)	(0.0023)		(0.0028)	(0.0029)		(0.0049)	(0.0049)		(0.0055)	(0.0058)
log_total_area	0.0055***	0.0053***	log_total_area	0.0005	-0.0003	log_total_area	0.0415***	0.0421***	log_total_area	0.0291***	0.0286***
	(0.0014)	(0.0015)		(0.0020)	(0.0023)		(0.0039)	(0.0041)		(0.0049)	(0.0055)
log_market_value	0.0123***	0.0117***	log_market_value	0.0096***	0.0103***	log_market_value	0.0526***	0.0505***	log_market_value	0.0522***	0.0524***
	(0.0016)	(0.0017)		(0.0020)	(0.0023)		(0.0043)	(0.0041)		(0.0055)	(0.0054)
Fixed-effects			*Fixed-effects*			*Fixed-effects*			*Fixed-effects*		
year	Yes	Yes	year	Yes	Yes	year	Yes	Yes	year	Yes	Yes
census_tract	Yes		census_tract	Yes		census_tract	Yes		census_tract	Yes	
num_units_bin	Yes	Yes	num_units_bin	Yes	Yes	num_units_bin	Yes	Yes	num_units_bin	Yes	Yes
building_type	Yes	Yes	building_type	Yes	Yes	building_type	Yes	Yes	building_type	Yes	Yes
year_blt_decade	Yes	Yes	year_blt_decade	Yes	Yes	year_blt_decade	Yes	Yes	year_blt_decade	Yes	Yes
num_stories_bin	Yes	Yes	num_stories_bin	Yes	Yes	num_stories_bin	Yes	Yes	num_stories_bin	Yes	Yes
GEOID		Yes	GEOID		Yes	GEOID		Yes	GEOID		Yes
Fit statistics			*Fit statistics*			*Fit statistics*			*Fit statistics*		
Observations	74,877	74,869	Observations	47,453	47,434	Observations	74,877	74,869	Observations	47,453	47,434
R^2	0.01911	0.03558	R^2	0.01468	0.03673	R^2	0.06469	0.08378	R^2	0.05158	0.07793
Within R^2	0.00378	0.00301	Within R^2	0.00139	0.00130	Within R^2	0.02464	0.02050	Within R^2	0.01612	0.01384
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*			*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*			*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*			*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*		

Table 6: Building-year targeting: share of evictions that are retaliatory by building demographics

Sample	Outcome	FE	Term	Estimate	SE	p
Full	Same period	Tract	% Black	0.0045	0.0057	0.429
Full	Same period	Tract	% Female	0.0048	0.0058	0.414
Full	Same period	Tract	% Black Female	-0.0169	0.0073	0.021
Full	Same period	Tract	Demog Coverage	-0.0076	0.0054	0.157
Full	Same period	Tract	log(Area)	0.0055	0.0014	0.000
Full	Same period	Tract	log(Mkt Value)	0.0123	0.0016	0.000
Full	Same period	Block Group	% Black	0.0027	0.0059	0.646
Full	Same period	Block Group	% Female	0.0040	0.0057	0.485
Full	Same period	Block Group	% Black Female	-0.0162	0.0074	0.029
Full	Same period	Block Group	Demog Coverage	-0.0083	0.0056	0.139
Full	Same period	Block Group	log(Area)	0.0053	0.0015	0.000
Full	Same period	Block Group	log(Mkt Value)	0.0117	0.0017	0.000
Pre-COVID	Same period	Tract	% Black	0.0014	0.0079	0.864
Pre-COVID	Same period	Tract	% Female	0.0056	0.0073	0.446
Pre-COVID	Same period	Tract	% Black Female	-0.0224	0.0097	0.022
Pre-COVID	Same period	Tract	Demog Coverage	-0.0068	0.0077	0.383

Pre-COVID	Same period	Tract	log(Area)	0.0005	0.0020	0.817
Pre-COVID	Same period	Tract	log(Mkt Value)	0.0096	0.0020	0.000
Pre-COVID	Same period	Block Group	% Black	-0.0030	0.0082	0.712
Pre-COVID	Same period	Block Group	% Female	0.0040	0.0072	0.573
Pre-COVID	Same period	Block Group	% Black Female	-0.0204	0.0098	0.038
Pre-COVID	Same period	Block Group	Demog Coverage	-0.0092	0.0076	0.226
Pre-COVID	Same period	Block Group	log(Area)	-0.0003	0.0023	0.898
Pre-COVID	Same period	Block Group	log(Mkt Value)	0.0103	0.0023	0.000
Full	Within BW	Tract	% Black	-0.0088	0.0118	0.456
Full	Within BW	Tract	% Female	-0.0016	0.0116	0.890
Full	Within BW	Tract	% Black Female	0.0071	0.0153	0.641
Full	Within BW	Tract	Demog Coverage	-0.0172	0.0110	0.119
Full	Within BW	Tract	log(Area)	0.0415	0.0039	0.000
Full	Within BW	Tract	log(Mkt Value)	0.0526	0.0043	0.000
Full	Within BW	Block Group	% Black	-0.0111	0.0114	0.333
Full	Within BW	Block Group	% Female	-0.0058	0.0114	0.613
Full	Within BW	Block Group	% Black Female	0.0123	0.0148	0.407
Full	Within BW	Block Group	Demog Coverage	-0.0163	0.0110	0.139
Full	Within BW	Block Group	log(Area)	0.0421	0.0041	0.000
Full	Within BW	Block Group	log(Mkt Value)	0.0505	0.0041	0.000
Pre-COVID	Within BW	Tract	% Black	-0.0207	0.0138	0.135
Pre-COVID	Within BW	Tract	% Female	-0.0074	0.0139	0.595
Pre-COVID	Within BW	Tract	% Black Female	0.0130	0.0186	0.486
Pre-COVID	Within BW	Tract	Demog Coverage	-0.0239	0.0143	0.095
Pre-COVID	Within BW	Tract	log(Area)	0.0291	0.0049	0.000
Pre-COVID	Within BW	Tract	log(Mkt Value)	0.0522	0.0055	0.000
Pre-COVID	Within BW	Block Group	% Black	-0.0289	0.0141	0.040
Pre-COVID	Within BW	Block Group	% Female	-0.0159	0.0143	0.268
Pre-COVID	Within BW	Block Group	% Black Female	0.0221	0.0188	0.240
Pre-COVID	Within BW	Block Group	Demog Coverage	-0.0254	0.0141	0.072
Pre-COVID	Within BW	Block Group	log(Area)	0.0286	0.0055	0.000
Pre-COVID	Within BW	Block Group	log(Mkt Value)	0.0524	0.0054	0.000

3.8 Complaint Suppression

Controlling for maintenance activity (permits as a proxy for landlord investment) and building conditions (violations), do buildings with more Black or female tenants file fewer complaints? A negative coefficient on % Black would indicate complaint suppression — Black tenants may be less likely to complain even when conditions warrant it, possibly due to fear of retaliation.

$$\text{filed\_complaint}_{it} = \beta_1 \cdot \widetilde{\text{Black}}_i + \beta_2 \cdot \widetilde{\text{Female}}_i + \beta_3 \cdot \widetilde{\text{Black} \times \text{Female}}_i + \gamma_1 \cdot \text{Permits}_{it} + \gamma_2 \cdot \text{Violations}_{it} + \delta' X_i + M_i + \alpha_{\text{geo}} + \gamma_i$$

Sample: All building-periods. **Controls:** log(total area), log(market value), permits, violations. **FE:** Period + tract/BG + unit count bin + building type + decade built + stories bin.

Dependent Variable:	filed_complaint	
	Tract FE	BG FE
Model:	(1)	(2)
Variables		
tc_black_c	0.0013***	0.0011***
	(0.0003)	(0.0003)
tc_female_c	-0.0001	-0.0001
	(0.0002)	(0.0002)
tc_black_female_c	0.0009***	0.0009***
	(0.0003)	(0.0003)
tc_cov_c	0.0013***	0.0013***
	(0.0003)	(0.0003)
tenant_comp_missing	0.0026***	0.0026***
	(0.0002)	(0.0002)
total_permits	0.0145***	0.0147***
	(0.0019)	(0.0018)
total_violations	0.0632***	0.0630***
	(0.0016)	(0.0014)
log_total_area	0.0053***	0.0052***
	(0.0004)	(0.0003)
log_market_value	0.0037***	0.0038***
	(0.0004)	(0.0003)
Fixed-effects		
period_fe	Yes	Yes
census_tract	Yes	
num_units_bin	Yes	Yes
building_type	Yes	Yes
year_blt_decade	Yes	Yes
num_stories_bin	Yes	Yes
GEOID		Yes
Fit statistics		
Observations	13,099,080	13,099,080
R^2	0.04451	0.04524
Within R^2	0.04096	0.04063

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Dependent Variable:	filed_complaint	
	Tract FE	BG FE
Model:	(1)	(2)
Variables		
tc_black_c	0.0009**	0.0006
	(0.0004)	(0.0004)
tc_female_c	-0.0001	-0.0001
	(0.0002)	(0.0002)
tc_black_female_c	0.0006	0.0007
	(0.0005)	(0.0005)
tc_cov_c	-6.03×10^{-5}	0.0001
	(0.0004)	(0.0004)
tenant_comp_missing	0.0026***	0.0027***
	(0.0002)	(0.0002)
total_permits	0.0177***	0.0180***
	(0.0022)	(0.0019)
total_violations	0.0748***	0.0747***
	(0.0015)	(0.0011)
log_total_area	0.0050***	0.0049***
	(0.0004)	(0.0003)
log_market_value	0.0022***	0.0025***
	(0.0004)	(0.0003)
Fixed-effects		
period_fe	Yes	Yes
census_tract	Yes	
num_units_bin	Yes	Yes
building_type	Yes	Yes
year_blt_decade	Yes	Yes
num_stories_bin	Yes	Yes
GEOID		Yes
Fit statistics		
Observations	6,475,704	6,475,704
R^2	0.05577	0.05650
Within R^2	0.05261	0.05238

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Dependent Variable:	filed_severe	
	Tract FE	BG FE
Model:	(1)	(2)
Variables		
tc_black_c	0.0015***	0.0014***
	(0.0002)	(0.0002)
tc_female_c	4.69×10^{-5}	1.47×10^{-5}
	(0.0001)	(0.0001)
tc_black_female_c	0.0013***	0.0013***
	(0.0002)	(0.0002)
tc_cov_c	-0.0003*	-0.0003
	(0.0002)	(0.0002)
tenant_comp_missing	0.0003***	0.0003***
	(0.0001)	(0.0001)
total_permits	-0.0001	-9.74×10^{-5}
	(0.0003)	(0.0003)
total_violations	0.0389***	0.0387***
	(0.0009)	(0.0009)
log_total_area	0.0035***	0.0034***
	(0.0003)	(0.0003)
log_market_value	0.0050***	0.0051***
	(0.0004)	(0.0003)
Fixed-effects		
period_fe	Yes	Yes
census_tract	Yes	
num_units_bin	Yes	Yes
building_type	Yes	Yes
year_blt_decade	Yes	Yes
num_stories_bin	Yes	Yes
GEOID		Yes
Fit statistics		
Observations	13,099,080	13,099,080
R^2	0.03163	0.03252
Within R^2	0.02823	0.02786

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Dependent Variable:	filed_severe	
	Tract FE	BG FE
Model:	(1)	(2)
Variables		
tc_black_c	0.0011***	0.0009***
	(0.0003)	(0.0003)
tc_female_c	0.0003*	0.0002
	(0.0002)	(0.0002)
tc_black_female_c	0.0008**	0.0009***
	(0.0003)	(0.0003)
tc_cov_c	-0.0008***	-0.0007***
	(0.0003)	(0.0003)
tenant_comp_missing	9.55×10^{-5}	0.0001
	(0.0001)	(0.0001)
total_permits	-0.0008**	-0.0008**
	(0.0004)	(0.0004)
total_violations	0.0428***	0.0427***
	(0.0010)	(0.0008)
log_total_area	0.0028***	0.0027***
	(0.0003)	(0.0002)
log_market_value	0.0041***	0.0043***
	(0.0003)	(0.0003)
Fixed-effects		
period_fe	Yes	Yes
census_tract	Yes	
num_units_bin	Yes	Yes
building_type	Yes	Yes
year_blt_decade	Yes	Yes
num_stories_bin	Yes	Yes
GEOID		Yes
Fit statistics		
Observations	6,475,704	6,475,704
R^2	0.03457	0.03533
Within R^2	0.03159	0.03138

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Dependent Variable:	filed_non_severe	
	Tract FE	BG FE
Model:	(1)	(2)
Variables		
tc_black_c	-0.0002	-0.0003
	(0.0002)	(0.0002)
tc_female_c	-0.0002	-0.0001
	(0.0001)	(0.0001)
tc_black_female_c	-0.0004**	-0.0004**
	(0.0002)	(0.0002)
tc_cov_c	0.0012***	0.0012***
	(0.0002)	(0.0001)
tenant_comp_missing	0.0021***	0.0021***
	(0.0001)	(9.29×10^{-5})
total_permits	0.0123***	0.0124***
	(0.0017)	(0.0016)
total_violations	0.0261***	0.0261***
	(0.0012)	(0.0008)
log_total_area	0.0016***	0.0017***
	(0.0001)	(0.0001)
log_market_value	-0.0011***	-0.0011***
	(0.0001)	(10×10^{-5})
Fixed-effects		
period_fe	Yes	Yes
census_tract	Yes	
num_units_bin	Yes	Yes
building_type	Yes	Yes
year_blt_decade	Yes	Yes
num_stories_bin	Yes	Yes
GEOID		Yes
Fit statistics		
Observations	13,099,080	13,099,080
R^2	0.01902	0.01940
Within R^2	0.01660	0.01657

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Dependent Variable:	filed_non_severe	
	Tract FE	BG FE
Model:	(1)	(2)
Variables		
tc_black_c	-0.0001	-0.0002
	(0.0003)	(0.0003)
tc_female_c	-0.0004**	-0.0004**
	(0.0002)	(0.0002)
tc_black_female_c	-0.0002	-0.0002
	(0.0003)	(0.0003)
tc_cov_c	0.0008***	0.0009***
	(0.0003)	(0.0003)
tenant_comp_missing	0.0026***	0.0027***
	(0.0001)	(0.0001)
total_permits	0.0189***	0.0192***
	(0.0022)	(0.0020)
total_violations	0.0375***	0.0375***
	(0.0015)	(0.0009)
log_total_area	0.0023***	0.0024***
	(0.0002)	(0.0002)
log_market_value	-0.0017***	-0.0017***
	(0.0002)	(0.0002)
Fixed-effects		
period_fe	Yes	Yes
census_tract	Yes	
num_units_bin	Yes	Yes
building_type	Yes	Yes
year_blt_decade	Yes	Yes
num_stories_bin	Yes	Yes
GEOID		Yes
Fit statistics		
Observations	6,475,704	6,475,704
R^2	0.03019	0.03078
Within R^2	0.02775	0.02769

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table 7: Complaint suppression: fewer complaints in buildings with more Black/female tenants?

Sample	Complaint type	FE	Term	Estimate	SE	p
Full	Any	Tract	% Black	0.0013	0.0003	0.000
Full	Any	Tract	% Female	-0.0001	0.0002	0.487
Full	Any	Tract	% Black Female	0.0009	0.0003	0.008
Full	Any	Tract	Demog Coverage	0.0013	0.0003	0.000
Full	Any	Tract	Permits	0.0145	0.0019	0.000
Full	Any	Tract	Violations	0.0632	0.0016	0.000
Full	Any	Block Group	% Black	0.0012	0.0003	0.000
Full	Any	Block Group	% Female	-0.0001	0.0002	0.489
Full	Any	Block Group	% Black Female	0.0009	0.0003	0.004
Full	Any	Block Group	Demog Coverage	0.0013	0.0003	0.000
Full	Any	Block Group	Permits	0.0147	0.0018	0.000
Full	Any	Block Group	Violations	0.0630	0.0014	0.000
Pre-COVID	Any	Tract	% Black	0.0009	0.0004	0.030
Pre-COVID	Any	Tract	% Female	-0.0001	0.0002	0.624
Pre-COVID	Any	Tract	% Black Female	0.0006	0.0005	0.203
Pre-COVID	Any	Tract	Demog Coverage	-0.0001	0.0004	0.868
Pre-COVID	Any	Tract	Permits	0.0177	0.0022	0.000
Pre-COVID	Any	Tract	Violations	0.0748	0.0015	0.000
Pre-COVID	Any	Block Group	% Black	0.0006	0.0004	0.166
Pre-COVID	Any	Block Group	% Female	-0.0001	0.0002	0.612
Pre-COVID	Any	Block Group	% Black Female	0.0007	0.0005	0.130
Pre-COVID	Any	Block Group	Demog Coverage	0.0001	0.0004	0.748

Pre-COVID	Any	Block Group	Permits	0.0180	0.0019	0.000
Pre-COVID	Any	Block Group	Violations	0.0747	0.0011	0.000
Full	Severe	Tract	% Black	0.0015	0.0002	0.000
Full	Severe	Tract	% Female	0.0000	0.0001	0.703
Full	Severe	Tract	% Black Female	0.0013	0.0002	0.000
Full	Severe	Tract	Demog Coverage	-0.0003	0.0002	0.095
Full	Severe	Tract	Permits	-0.0001	0.0003	0.675
Full	Severe	Tract	Violations	0.0389	0.0009	0.000
Full	Severe	Block Group	% Black	0.0014	0.0002	0.000
Full	Severe	Block Group	% Female	0.0000	0.0001	0.909
Full	Severe	Block Group	% Black Female	0.0013	0.0002	0.000
Full	Severe	Block Group	Demog Coverage	-0.0003	0.0002	0.114
Full	Severe	Block Group	Permits	-0.0001	0.0003	0.768
Full	Severe	Block Group	Violations	0.0387	0.0009	0.000
Pre-COVID	Severe	Tract	% Black	0.0011	0.0003	0.000
Pre-COVID	Severe	Tract	% Female	0.0003	0.0002	0.100
Pre-COVID	Severe	Tract	% Black Female	0.0008	0.0003	0.013
Pre-COVID	Severe	Tract	Demog Coverage	-0.0008	0.0003	0.001
Pre-COVID	Severe	Tract	Permits	-0.0008	0.0004	0.032
Pre-COVID	Severe	Tract	Violations	0.0428	0.0010	0.000
Pre-COVID	Severe	Block Group	% Black	0.0009	0.0003	0.003
Pre-COVID	Severe	Block Group	% Female	0.0002	0.0002	0.141
Pre-COVID	Severe	Block Group	% Black Female	0.0009	0.0003	0.007
Pre-COVID	Severe	Block Group	Demog Coverage	-0.0007	0.0003	0.007
Pre-COVID	Severe	Block Group	Permits	-0.0008	0.0004	0.038
Pre-COVID	Severe	Block Group	Violations	0.0427	0.0008	0.000
Full	Non-severe	Tract	% Black	-0.0002	0.0002	0.253
Full	Non-severe	Tract	% Female	-0.0002	0.0001	0.287
Full	Non-severe	Tract	% Black Female	-0.0004	0.0002	0.048
Full	Non-severe	Tract	Demog Coverage	0.0012	0.0002	0.000
Full	Non-severe	Tract	Permits	0.0123	0.0017	0.000
Full	Non-severe	Tract	Violations	0.0261	0.0012	0.000
Full	Non-severe	Block Group	% Black	-0.0003	0.0002	0.113
Full	Non-severe	Block Group	% Female	-0.0001	0.0001	0.385
Full	Non-severe	Block Group	% Black Female	-0.0004	0.0002	0.034
Full	Non-severe	Block Group	Demog Coverage	0.0012	0.0001	0.000
Full	Non-severe	Block Group	Permits	0.0124	0.0016	0.000
Full	Non-severe	Block Group	Violations	0.0261	0.0008	0.000
Pre-COVID	Non-severe	Tract	% Black	-0.0001	0.0003	0.665
Pre-COVID	Non-severe	Tract	% Female	-0.0004	0.0002	0.035
Pre-COVID	Non-severe	Tract	% Black Female	-0.0002	0.0003	0.588
Pre-COVID	Non-severe	Tract	Demog Coverage	0.0008	0.0003	0.003
Pre-COVID	Non-severe	Tract	Permits	0.0189	0.0022	0.000
Pre-COVID	Non-severe	Tract	Violations	0.0375	0.0015	0.000
Pre-COVID	Non-severe	Block Group	% Black	-0.0002	0.0003	0.399
Pre-COVID	Non-severe	Block Group	% Female	-0.0004	0.0002	0.047
Pre-COVID	Non-severe	Block Group	% Black Female	-0.0002	0.0003	0.576
Pre-COVID	Non-severe	Block Group	Demog Coverage	0.0009	0.0003	0.000
Pre-COVID	Non-severe	Block Group	Permits	0.0192	0.0020	0.000
Pre-COVID	Non-severe	Block Group	Violations	0.0375	0.0009	0.000

4 Interpretation

The distributed lag model tests whether eviction filings increase *after* a complaint is filed — a temporal pattern consistent with landlord retaliation. The key coefficients are the positive leads ($k > 0$), which indicate elevated eviction filings in the periods following a complaint.

The same-period model estimates the contemporaneous correlation, while the tenant-composition augmented version tests whether retaliatory behavior differs by the racial or gender composition of the building's tenants.

The tract FE models provide a less restrictive comparison: if the PID FE and tract FE estimates are similar, the complaint–eviction relationship is not merely a cross-sectional feature of buildings that both complain and evict at higher rates; it persists within the same building over time.

The **retaliatory targeting** analysis flips the question: among evictions that do happen, are retaliatory ones disproportionately concentrated in buildings with more Black/female tenants? This directly tests whether retaliation is a mechanism of demographic targeting.

The **complaint suppression** analysis tests the complementary channel: controlling for maintenance and building conditions, do Black/female-occupied buildings file fewer complaints? Combined with the targeting results, this maps the full complaint–retaliation cycle and identifies where demographic disparities enter.

The bandwidth analysis provides a complementary non-parametric measure: what fraction of eviction filings are "plausibly retaliatory" (occurring within b periods of a complaint)?