

# The Bronx is Burning: Urban Disinvestment Effects of the Fair Access to Insurance Requirements

**Ingrid Gould Ellen** *New York University*

**Daniel Hartley** *Federal Reserve Bank of Chicago*

**Jeffrey Lin** *Federal Reserve Bank of Philadelphia*

**Wei You** *Peking University*

The views expressed are those of the authors and do not necessarily represent the views of the Federal Reserve Banks of Chicago, Philadelphia, or the Board of Governors of the Federal Reserve System and its staff.

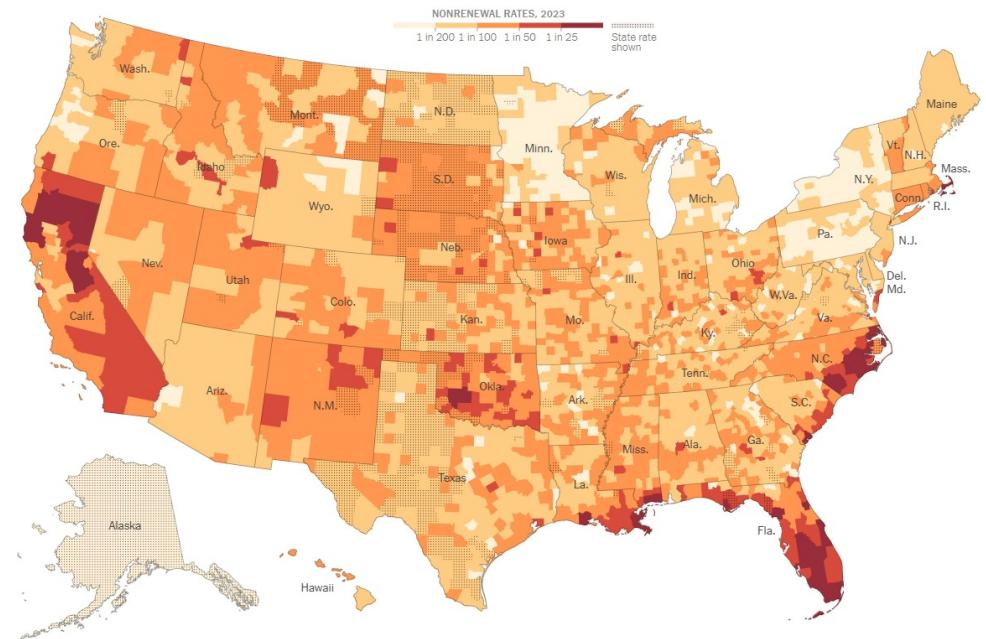


# Property Insurance Crisis in 2024

## Insurers Are Deserting Homeowners as Climate Shocks Worsen

Without insurance, it's impossible to get a mortgage;  
without a mortgage, most Americans can't buy a home.

New York Times Dec. 18, 2024



# 1960s Urban Property Insurance Crisis

## After WWII, insurers fled US central cities

- By the 1960s, property insurance was expensive, scarce, vulnerable to cancellation.

New York Times,  
Aug 15, 1967



**Troubled State of Society** | Columbia Missourian,  
**Disturbs Insurance Industry** | April 17, 1968

## Fair Access to Insurance Requirements (FAIR)

- State residual property insurance offered to property owners without private options.
- Implemented by 26 States + DC in the 1960s.
- Problematic features:
  - Prohibited use of environmental or neighborhood factors in underwriting.
  - Mandatory insurer participation in loss pools diluted underwriting incentives.
  - Payouts far exceeded market values in declining neighborhoods.
- Some blamed FAIR for 1970s arson wave. Others blamed disinvestment in public fire protection.

# Research Question



What were the effects of **FAIR plans** on housing and neighborhoods?

## Challenges

- Measurement of exposure to FAIR.
- Identifying appropriate counterfactual.

## Our approach

- City directories measure post-war reductions in insurance access.
- Triple-difference design.

# What We Do



## Triple-difference design

- Naïve comparison of properties and neighborhoods with & w/o FAIR is **infeasible** (no policy microdata) and **confounded** (by owner & property factors in eligibility, take-up).
- (1) Pre/post FAIR, (2) Neighborhoods with/without likely FAIR access, (3) Participating/non-participating States.
- Symmetric analysis of participating (**early-FAIR**) and non-participating States (i) controls for confounding differences across neighborhoods and (ii) addresses endogenous (unobserved) take-up.
- We estimate ITT effects.

# Results



**Design of early FAIR plans reduced incentives to invest in housing maintenance, which led to declines in stock of pre-war housing units in FAIR-affected tracts**

- Estimated ITT effect of -313 (-30%) pre-war housing units, mostly in 1970s.
  - Or about 45% of the loss of pre-war housing units from 1960-1980
- Concentrated in multi-family structures and renter-occupied units.
- Quantitatively matches (new) evidence on building fires.

**FAIR disinvestment led to significant neighborhood change**

- Declines in neighborhood population and income.
- Increased Black population share & accelerated racial transition.
- Total effects include direct and indirect effects (through spillovers).

# Contributions 1

## Effects of FAIR Plans

- Mostly historical, legal analyses to date (Ansfield, 2021; Dwyer, 1978; Works, 1977)
- We estimate causal effects for a broad set of cities

## Central neighborhood decline and change

- White flight (Boustan, 2010), blockbusting (Hartley and Rose, 2023)
- Urban unrest (Collins and Margo, 2007; Brooks et al., 2022)
- We identify a channel through generosity of FAIR plans.
- Role of housing disinvestment (Cornelissen and Jang-Trettian, 2023)
- The other side of the “doom loop”: Housing disinvestment → neighborhood decline.

# Contributions 2

## **Market failures in insurance markets**

- Moral hazard in health insurance (Finkelstein, 2014)
- Moral hazard in auto insurance (Weisburd, 2015)
- Moral hazard from house price declines (Eriksen and Carson, 2017)
- **We study moral hazard from property insurance design.**

# Roadmap



- Introduction
- **Historical Background**
- Data and Methods
- Results

# Historical Context

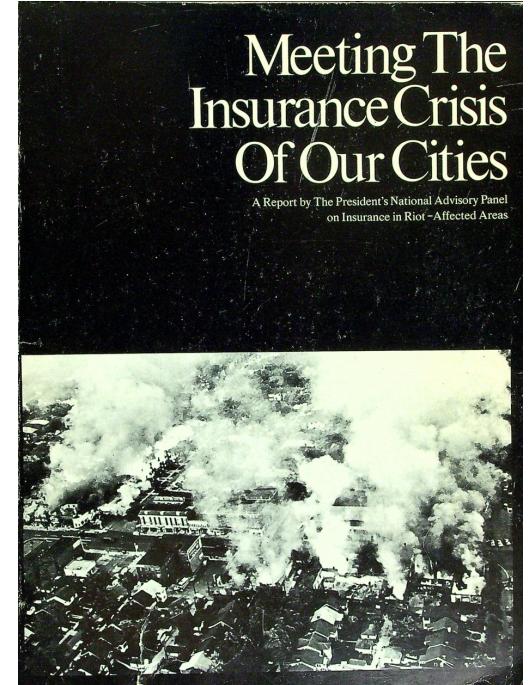


## Hughes Panel (offshoot of Kerner “Riot” Commission)

- “Long hot summer” of 1967.
- **National Advisory Panel on Insurance in Riot-Affected Areas** of August 1967.
- Panel recommended FAIR plans; Became law August 1968.

## FAIR plans

- Modeled on Boston Plan of 1960 & 13 early State plans.
- 26 States + DC began issuing FAIR policies 1968-1970.
- 300k+ policies in 1969, 2.7M+ by 1972, 5.7M+ by 1977.



*“One of the most urgent needs in America’s cities today is to assure that the property of businessmen and homeowners is adequately protected by insurance.*

President Johnson, Jan 27, 1968

# Design & Establishment of FAIR Plans

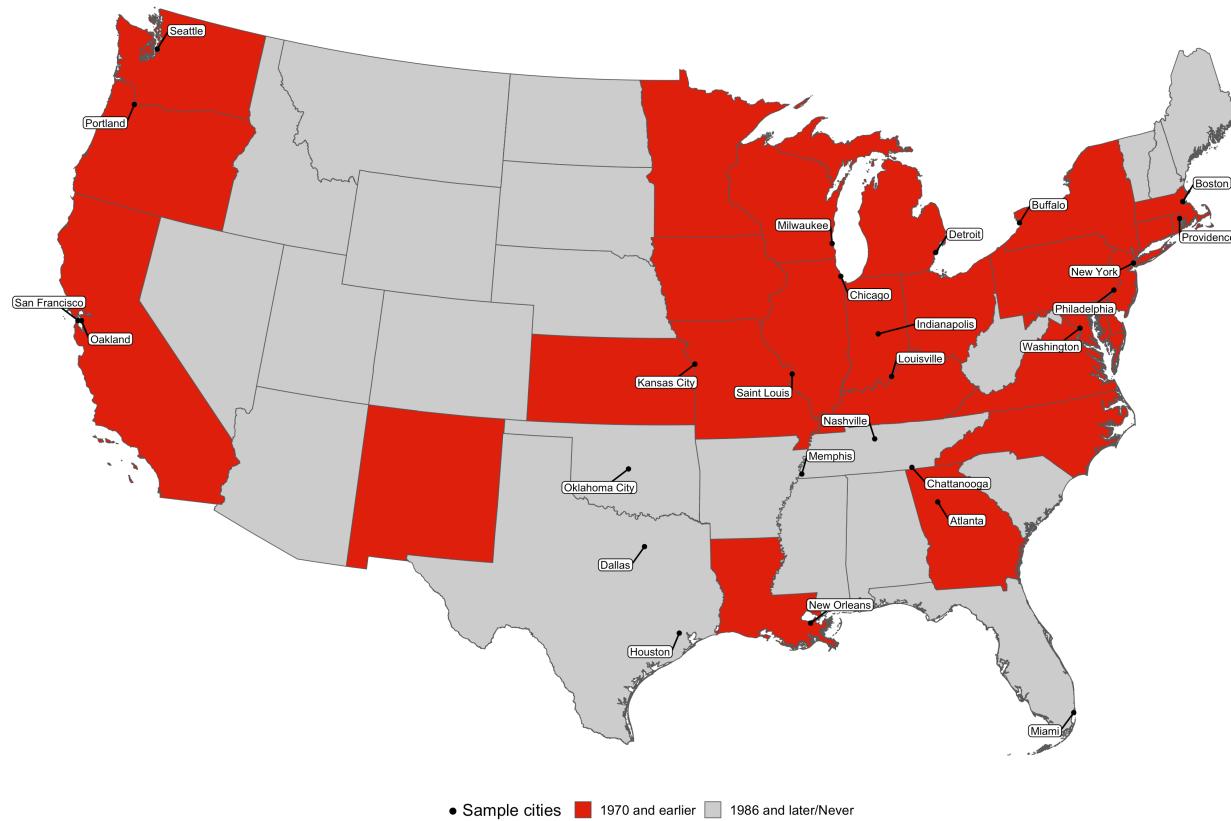
## FAIR plan features

- Prohibited use of environmental or neighborhood factors (“beyond property owner’s control”) in underwriting.
- Mandatory insurer participation in loss pools diluted incentives for prudent underwriting.
- Payouts far exceeded market values in declining neighborhoods.

## States had to choose to participate

- Feds offered “carrot” of federal riot reinsurance.
- **Early FAIR States:** 18 States + DC in 1968, 26 States + DC by 1970.
- Other States did not participate until 1986 at earliest, or never.

# Early-FAIR States & Sample Cities



# Unintended Consequences: Contemporary Coverage & Debate



## *Big profit in insurance claims possible from burned out hulks*

THERE WERE 30 gallons of flammable liquid sloshed thru the hallways and dripping over the rotting third-floor railings of the South Side tenement—enough to cause what investigators called a "major holocaust."

To make sure it did, an open-faced toaster stuffed with paper and connected to an automatic timing device had been placed in a pool of the volatile liquid.

Unknown to the seven families living there, the corner building at 53d Street and Prairie Avenue, was a time bomb set to go off at 5 p. m., Jan. 12, 1972.

### Task Force report

The Tribune's Pulitzer Prize-winning Task Force investigated Chicago's top 10 slumlords. This article, the fifth in a series, tells how slumlords turned worthless, vacant buildings into gold mines. The series was prepared and written by David Young, Task Force director; and reporters Pamela Zekman, Jerry Thornton, and Robert Unger.

Grand Jury in connection with the attempted arson.

A FOUR-MONTH Tribune Task Force investigation of slumlord operations has documented how unexplained fires strike buildings like these with incredible frequency, marking the final step in the pillaging of the slums.

ment had sent notice of serious code violations just six days before the toaster bomb was planted.

Victor Spector, operator of Spector Realty and another of Chicago's top slumlords, had a \$65,000 insurance policy on the building. He denied any involvement in the attempted arson, but told fire investiga-

ty between this attempted arson and a fire that destroyed a Spector-owned building at 4446-48 S. Calumet Av. a year before. Witnesses told police that some containers holding flammable liquid were carried into the Calumet Avenue building by "painters" three days before the fire.

Spector's \$24,922 insurance claim was paid without question, because insurance investigators said they were unaware of the suspicious incidents preceding the blaze.

Mysterious fires like these went virtually uninvestigated until recently, despite the fact that some slumlords were paid hundreds of thousands of dollars in fire insurance claims on scores of fires.

"The Fair Plan was set up under the assumption that persons seeking policies would be responsible residents of the communities who were not afforded equal opportunities to own property and obtain insurance in declining areas," a spokesman said. "No one anticipated the potential abuses."

Rauter mentioned several regulations that practically invite arson:

- Fair Plan must insure a hotel in the worst neighborhood in Chicago for the same amount it would be insured for if it were located in Kenilworth. Records show slumlords have taken advantage of this regulation, sometimes insuring buildings for 20 to 30 times what they paid, when "they aren't worth anything unless you burn them," Rauter said.

Chicago Tribune, 1973

# Roadmap



- Introduction
- Historical Background
- **Data and Methods**
- Results

# What We Do



## Triple-difference design

- (1) Pre/post FAIR,
- (2) **Neighborhoods with/without likely FAIR access,**
- (3) **Participating/non-participating States.**

# Neighborhoods with likely FAIR access

**Measure neighborhoods where property owners likely to have been offered FAIR plans**

- Neighborhoods that saw declining access to property and casualty insurance establishments between 1940 and 1967
- We measure insurer withdrawal in both **early-FAIR States** that offered FAIR plans in the 1960s and non-participating states that did not.

**Placebo treatment**

- Post-war declines in access to lawyers.

# Insurer (and Lawyer) Data from City Directories



## City Directories and Yellow Pages

- 26 major cities in early-FAIR & non-participating states.
- Two snapshots, ~1940 & ~1967.

# Measuring Declining Market Access

Calculate market access for  $t=1940$  and  $1967$ , aggregating census tract  $i$  proximity to all geocoded property & casualty insurers  $j$  in city.

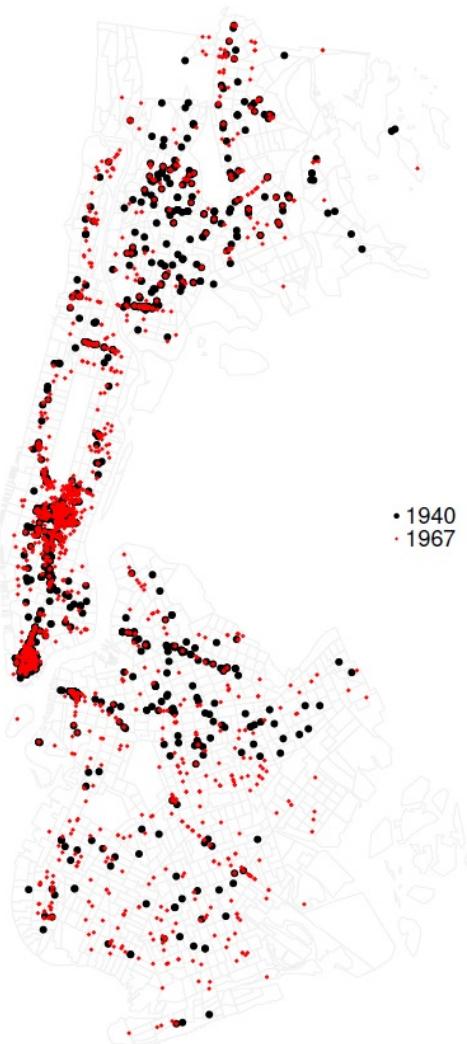
$$M_{ict} = (1/G_{ct}) \sum_{j=1}^{J_{ct}} e^{-\gamma d_{ij}}$$

- A distance-weighted sum from each tract to all insurers in city,  $c$  in year,  $t$

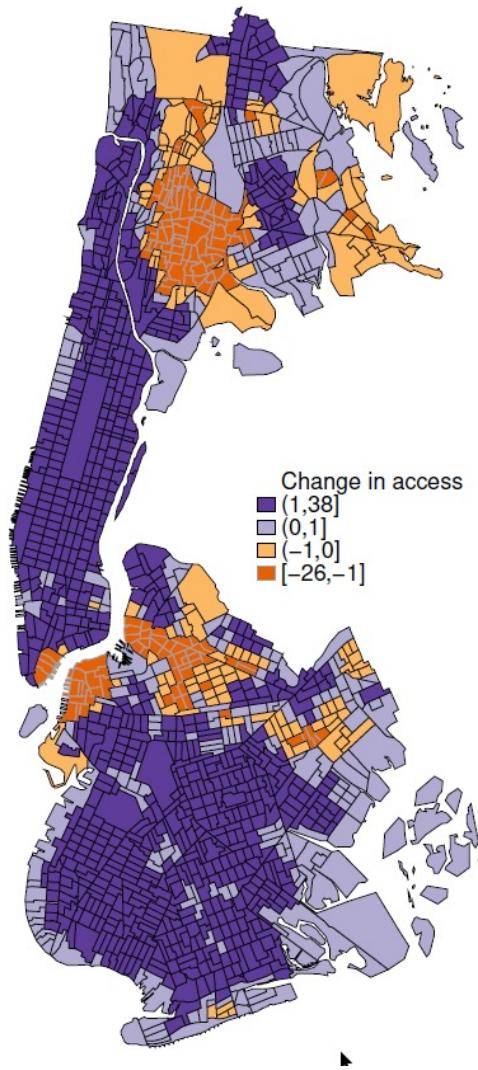
We calibrate  $\gamma = 4$ , implying 95% decay at 0.75 miles.

- Weight by inverse of city-year geocoding rate  $G_{ct}$
- Correlates well with 1977 snapshot survey of FAIR policies in NYC.

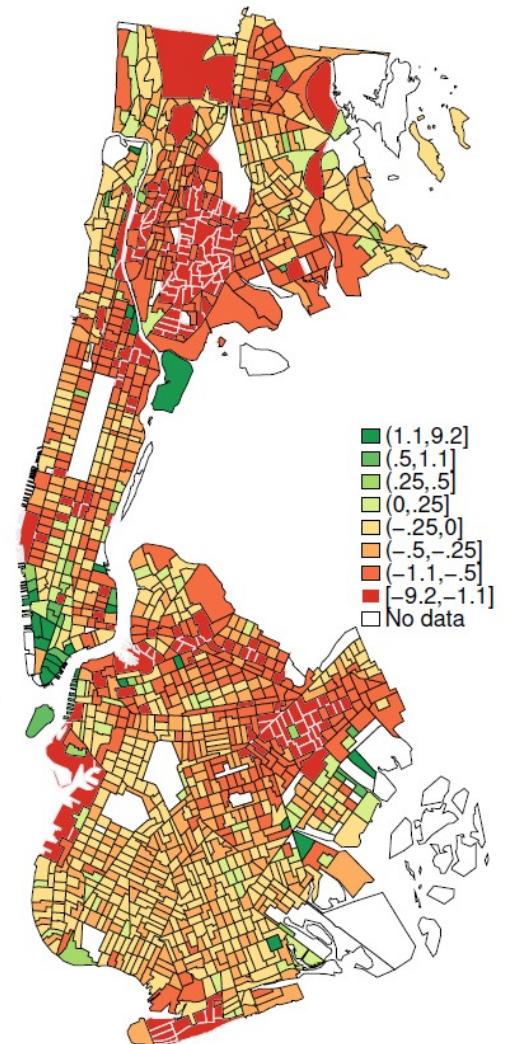
(a) Private property insurers



(b) Change in insurer access, 1940–1967



(c) Log change in pre-war HUs, 1960–1980



# Triple-Difference Specification

$$y_{icst} = \beta_1 F_s I_{ics} Post_t + \beta_2 F_s Post_t + \beta_3 I_{ics} Post_t \\ + \beta_4 F_s I_{ics} + \beta_5 F_s + \beta_6 I_{ics} + \beta_7 Post_t + \epsilon_{icst},$$

## Additional Specifications:

- Census tract fixed effects
- Allow neighborhood characteristics to have time-varying effects
  - 1950-60 Change in Log Population \*  $1\{t\}$
  - 1950-60 Change in Percent Black \*  $1\{t\}$

# Neighborhood Data

**Consistent-boundary census tract panel 1950–1990** (Lee and Lin, 2018)

- Total prewar housing units (year built<1940)
- Total housing units, by tenure, by structure type (MF vs SF)
- Population, by race
- Average household Income
- Average gross rent
- Average years of education

**Sample: Balanced panel of ~6,000 tracts in 26 cities, five decennials**

# Treatment & Comparison Groups

	<b>Neighborhoods</b>	<b>Percent</b>
Reduced access, Early FAIR State	965	16%
Stable access, Early FAIR State	3,899	65%
Reduced access, Late FAIR State	240	4%
Stable access, Late FAIR State	872	15%
<b>Total</b>	<b>5976</b>	<b>100%</b>

# Roadmap

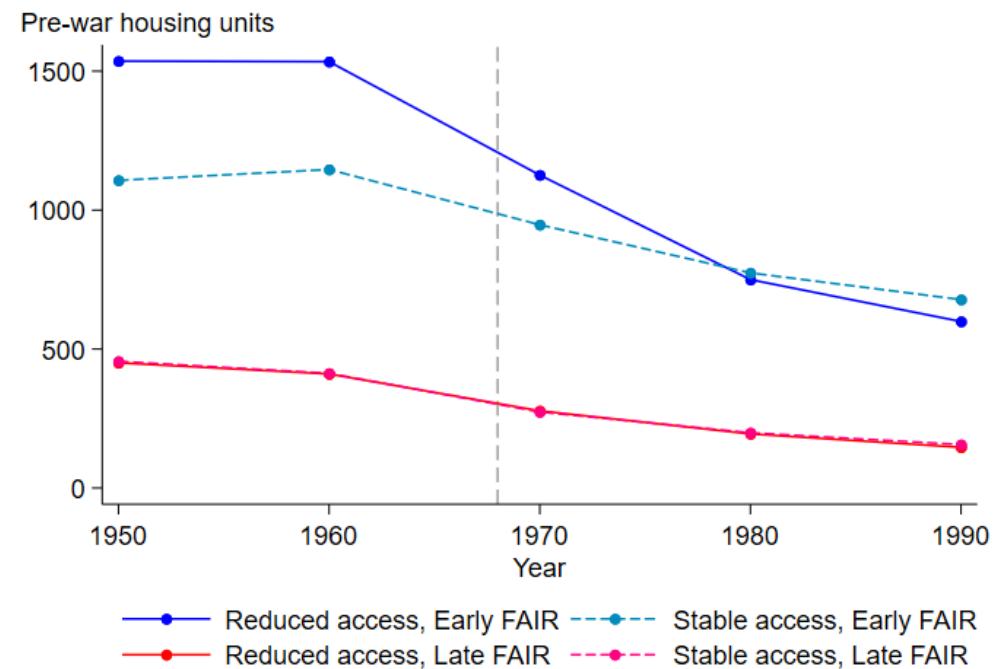


- Introduction
- Historical Background
- Data and Methods
- **Results**

# Disinvestment in Housing

## Housing units built 1940 & earlier

- By year, and
- By treatment & comparison groups.



# Triple Difference Estimates

Pre-war Housing Units	Insurers	Insurers	Insurers
1(reduced access)	-382.3***	-382.9***	-312.5***
*1(early FAIR)*1(after 1970)	(71.6)	(71.1)	(73.1)
City-Year FEs		X	X
Tract FEs		X	
<i>Interactions with decade:</i>			
(change in log population, 1950-60)			X
(change in Black share, 1950-60)			X
<b>N</b>	29,726	29,726	29,726
<b>R2</b>	0.167	0.843	0.248

Notes: Standard errors clustered by city.

# Triple Difference Estimates: Lawyer Placebo

Prewar HUs	Insurers (Lawyer sample)	Lawyers
1(reduced access)	-349.3*** (147.9)	-84.2 (104.8)
*1(early FAIR)*1(after 1970)		
City-Year FEs	X	X
Tract FE		
<i>Interaction with decade:</i>		
(change in log population, 1950-60)	X	X
(change in Black share, 1950-60)	X	X
<b>N</b>	24,024	24,024
<b>R2</b>	0.216	0.212

Notes: Standard errors clustered by city.

# Event Study Estimates

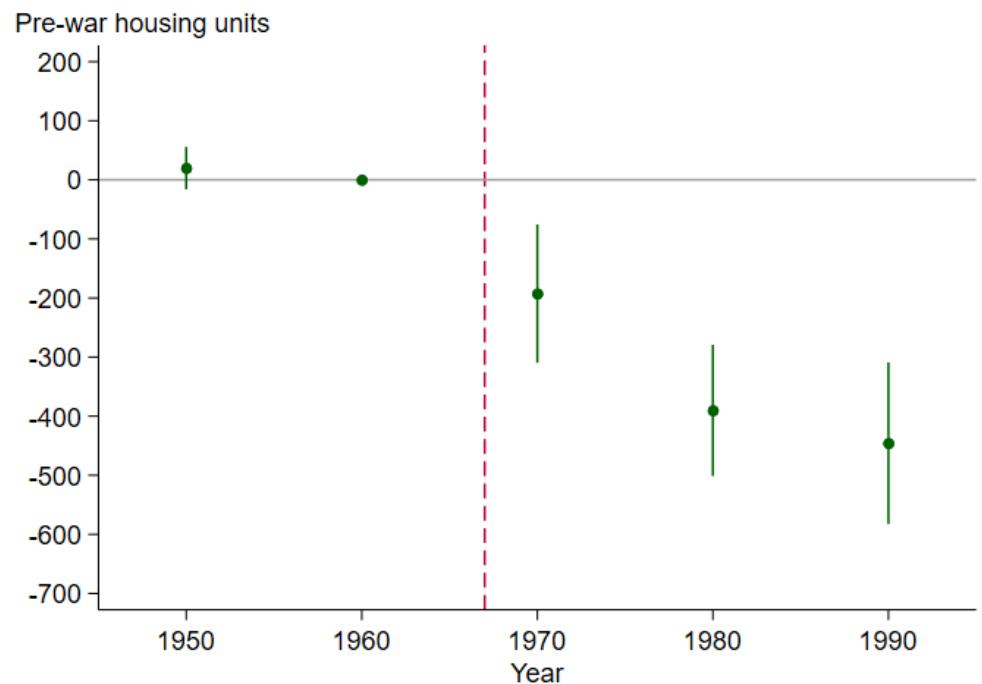
Change since 1960 in prewar HUs

Spec 3 controls:

- 1950-1960 changes in log population, Black share \*  $1\{t\}$

Timing:

- 90% of dynamic effect by 1980, when reforms allowed for stricter FAIR underwriting.



# Negative Effects for Rentals & Multi-Family

Outcome variable: Treatment definition:	(1) Housing units (HUs)	(2) Owner- occupied HUs	(3) Renter- occupied HUs	(4) Single-family HUs	(5) Multi-family HUs
1(Reduced Access)*1(early FAIR)	-439.6*** (125.3)	-15.2 (52.6)	-426.1*** (83.4)	34.4 (62.5)	-474.9*** (78.8)
*1(>=1970)					

## Negative effects for:

- Renter-occupied housing units
- Housing units in MF structures

## Null effects for:

- Owner-occupied housing units
- Single-family housing units

# Neighborhood Racial Transition and Decline

Outcome variables:	(1) log of white population	(2) log of black population	(3) log of nonwhite population	(4) log of tract population	(5) share black	(6) Years of educ. persons 25+	(7) log of avg. contract rent	(8) log of avg. income
1(Reduced Access)*1(early FAIR)	-0.494*** (0.174)	-0.181 (0.122)	-0.333*** (0.110)	-0.188** (0.075)	0.086*** (0.030)	0.081 (0.234)	-0.030 (0.057)	-0.096** (0.044)
*1(>=1970)								

## Significant effects on neighborhoods:

- Increased Black share, decreased population, decreased income.
- Total effects incorporating both direct effects on neighborhood QOL and sorting and indirect effects operating through spillovers.

# Suggestive Evidence from City-Level Fires

## Building fires

- We hand-annotated annual city-level building fire surveys 1938-1978. NFIRS 1980-1988.

## Regression of fires in 43 FAIR non-FAIR cities:

$$\log \text{fires}_{ct} = \delta_c + \delta_t + \alpha_c t + \gamma \text{Post}_t \times F_s + \epsilon_{ct}$$

## Results

- DD estimate: 32% more building fires in early-FAIR states after 1968.
- This result is mainly driven by 1968-1980 period, post-1980 magnitude is roughly half the size and not statistically different from zero
- Pre-trends look good, small magnitude and not statistically significant
- Back-of-the-envelope calculation: 200-300 building fires per tract per decade

# Other Results and Robustness

## Pre-trends analysis

- 1950-60 trends in 11 factors and 1940-50 trends for available subsample.

## Robustness

- Different definitions of treatment.
- Validation using 1977 FIA survey of FAIR plans.
- Sensitivity to outlier cities.

# Summary



## Housing disinvestment

1960s FAIR plans led to  
**disinvestment in housing.**



## Neighborhood change

FAIR plans also accelerated  
neighborhood racial transitions  
and declines in population and  
income.



## Conclusions

Cautionary lesson in designing  
insurance policy.  
Fairness in access is important,  
but over-insurance can  
backfire.

# Property Insurance Crisis in 2024

Homeowners struggle to find, afford insurance  
amid California's crisis, KCRA, Feb 26, 2024



**Florida Insurance Crisis Spells Mortgage Disaster**  
Newsweek, Jan 22, 2024



# Appendix

## **ARSON-FOR-PROFIT: ITS IMPACT ON STATES AND LOCALITIES**

---

**HEARINGS**  
BEFORE THE  
**SUBCOMMITTEE ON  
INTERGOVERNMENTAL RELATIONS**  
OF THE  
**COMMITTEE ON GOVERNMENTAL AFFAIRS**  
**UNITED STATES SENATE**  
NINETY-FIFTH CONGRESS  
FIRST SESSION  
  
DECEMBER 14 AND 15, 1977

Printed for the use of the Committee on Governmental Affairs



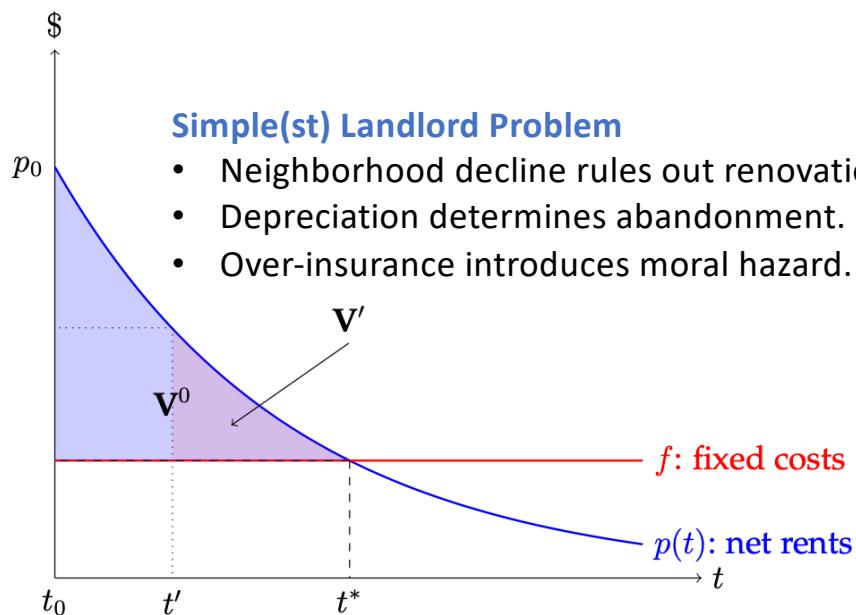
Evidence secured in many of our large urban cities indicates that arson-for-profit is growing like a cancer. We know that Senator Percy of Illinois, a member of this subcommittee, has grave concerns regarding the possibility that Fair Access to Insurance Requirements [FAIR] plans established under the Urban Property Protection and Reinsurance Act of 1968 may be providing an incentive for arson.

The concern is that under FAIR plans fire insurance is made readily available, although insurers are hampered in underwriting fire risks. This may tempt some unscrupulous and financially pressed landlords to apply the torch to their own buildings, particularly in our urban cities. At present FAIR plans operate in 28 States, with some plans statewide and others providing insurance only within the urban area of the State. To what extent could FAIR plans be influencing the increase of arson-for-profit within these urban centers?

First, one must recognize that managers of these State FAIR plans are presently required to adhere to underwriting criteria dictated by the Federal Insurance Administration [FIA]. In order to participate in the riot reinsurance program, the insurance industry is prevented by FIA from performing a complete and essential underwriting function prior to placing coverage, and this has been a source of concern to insurers.

The underwriting approach that is most rational is to identify the arson-prone risk and/or unsafe building prior to issuing fire insurance coverage. This, we are convinced, would help eliminate or screen out many of the arson-for-profit "schemers" and make buildings more fireproof. The Federal Insurance Administration believes differently.

# FAIR & Landlord Abandonment



## Over-insurance & under-selectivity

- FAIR payouts based on replacement costs & underwriting excluded neighborhood factors.
- In declining central US cities, replacement costs far exceeded market value.
- FAIR sharply increased the benefits of landlord abandonment.

# Balance Tests

	(1)	(2)	(3)	(4)
	Coef.	std. err.	Coef..	std. err.
<i>1960–1950 Changes in:</i>				
Black Population Share	-0.0616***	(0.0185)	0	0
Population (log)	0.117***	(0.0386)	0	0
White Population (log)	0.266***	(0.0881)	-0.0106	(0.0111)
Black Population (log)	0.177**	(0.0699)	-0.0229	(0.0194)
Nonwhite Population (log)	0.185**	(0.0665)	-0.00231	(0.0203)
Pre-war Housing Units	22.11	(15.42)	13.52	(17.76)
Years of Education	0.0899**	(0.0365)	0.0395	(0.0559)
Contract Rent (log)	-0.0529*	(0.0271)	-0.0519*	(0.0287)
Income (log)	0.0333	(0.0238)	0.0204	(0.0258)
Total Housing Units (log)	0.0659***	(0.0169)	-0.0222	(0.0251)
College Share (25+)	0.00456	(0.00292)	0.00342	(0.00339)

# Event Studies

