Who Pays for Rent Control? Heterogeneous Landlord Response to San Francisco's Rent Control Expansion

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Steadily rising housing rents in many of the US's large, productive cities has brought the issue of affordable housing to the forefront of the policy debate and reignited the discussion over expanding or enacting rent control provisions. While the details of rent control regulations vary some across places, they generally regulate rent increases and place restrictions on evictions. State lawmakers in California, Colorado, Illinois, and Oregon have considered repealing laws that limit cities' abilities to pass or expand rent control.

Despite the policy interest, due to a lack of detailed data and natural experiments, we have little well-identified empirical evidence evaluating how introducing local rent controls affects tenants, landlords, and the broader housing market. In our companion paper, (Diamond, McQuade and Qian 2018a), we exploit an unexpected 1994 law change that suddenly rent controlled a subset of San Francisco buildings and their tenants, based on the year each building was built. However, the law left very similar buildings and tenants without rent control. We found tenants covered by rent control place a substantial value on the benefit, as revealed by their choice to remain in their apartments longer than those without rent control. However, landlords of properties affected by the law change respond over the long term by substituting to other types of real estate, decreasing the supply of rent controlled housing by 25 percent. In particular, landlords responded by converting to condos and redeveloping buildings so as to exempt themselves from rent control.

In this paper, we investigate which types

of landlords choose to substitute away from supplying rent controlled housing versus remain in the rent-controlled sector. statuary incidence of the large rental subsidies paid to tenants of rent controlled apartments falls on the landlords of these properties. Landlords can avoid these rental subsidies by substituting away from supplying rent controlled housing. However, this is only cost effective if the cost of substituting away is less than the expected increased revenue stream from this substitution. Indeed, the upfront costs of substituting towards owner occupied housing or new construction are likely quite large. Landlords may be forced to pay incumbent rental tenants to move out. They may also need to incur substantial renovation costs to either build an entirely new building or to upgrade the apartments so as to make them attractive to potential buyers. Only landlords with cheap enough access to capital, either through loans or liquid wealth, will be able to fund these upfront costs, enabling them to earn higher revenues from their real estate. In contrast, credit constrained landlords will be the ones who are unable to substitute away from rent control, forcing them to pay the full cost of the rental subsidies to their rent controlled tenants. Indeed, this suggests that using rent control as a way to raise revenue for tenant rental subsidies may operate as a regressive landlord tax.

To investigate which types of landlords choose to remain in the rent controlled market versus substitute away, we investigate the heterogeneous responses to rent control between corporate versus individual landlords using the same 1994 rent control expansion natural experiment from our previous work. We find that properties that have a corporate landlord at the time of the rent control expansion decrease their supply of rent controlled housing by 64 percent,

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while properties owned by individuals only decrease their supply by 14 percent. Corporate landlords replace this lost housing supply by increasing their supply of nonrent controlled rentals by 20 percent and by selling to owner occupants, increasing their size by 10 percent. Corporate landlords primarily evade rent control by investing in new construction rentals, the most capital intensive version of rent control evasion. Since corporate landlords likely have much cheaper access to capital than individuals, they are able to evade rent control at almost four times the rate of individual landlords.

We further breakdown the individual landlord responses by race of the landlord. Proponents of rent control often argue that rent control disproportionately helps minority renters, however little thought has been given to whether rent control has differential effects on minority landlords. Reassuringly, we do not find differential landlord responses to rent control based on the landlord's race.

I. San Francisco's Rent Control Expansion

In 1979, San Francisco imposed rent control on all standing buildings with 5 or more apartments. While all large buildings built as of 1979 would now be rent controlled, new construction was exempt from the law, since legislators did not want to discourage new development. In addition, smaller multi-family buildings were exempt from rent control since they were viewed as more "mom and pop" ventures, and did not have market power over rents. However, this small multi-family exemption was lifted through a 1994 San Francisco ballot initiative, which barely passed. Since the initial 1979 rent control law only impacted properties built from 1979 and earlier, the removal of the small multi-family exemption also only affected properties built 1979 and earlier. This led to quasi-experimental rent control expansion in 1994 based on whether the small multi-family housing was built prior to or post 1980. See (Diamond, Mc-Quade and Qian 2018a) for more details.

II. Classifying Landlords

For each building in our study, we use transaction history data since 1988 and its current owners provided by DataQuick to identify each property's landlords on December 31st, 1993. We classify a property as being owned by an individual if all of its identified owners are individuals. Properties with at least one corporate owner are classified as corporate owned. parcels with individual landlords, we impute each landlord's race using NamePrism ((Ye et al. 2017)), software that uses machine learning to compute racial probabilities based on one's first and last name. A parcel has white landlords if at least one of its identified owners is white, and has minority landlords if all its identified owners are minorities. More details of landlord classifications are provided in the Online Appendix.

Summary statistics of landlords by type are provided in Table 1. We find that landlords in San Francisco are primarily individuals, accounting for 91.45% of the total landlord population. Corporate landlords manage 8.55% of the multifamily housing in San Francisco. Whites account for 66.56% of the landlord population, while 24.89% of multifamily housing is managed by minority landlords.

III. Estimation and Results

To estimate treatment effects of rent control on landlords, we follow our previous work and compare the landlord responses among properties treated by rent control (built between 1900 and 1979), relative to those untreated (built between 1980 and 1990) located in the same zipcode. Specifically, we estimate:

(1)
$$Y_{kzt} = \delta_{zt} + \lambda_k + \beta T_k * Post_t + \epsilon_{kt}$$
,

where k denotes the individual property and λ_k represents property fixed effects. The variable T_k denotes treatment, equal to one if, on December 31, 1993, the parcel is a multi-family building with less than or equal to four units built between the years 1900 and 1979. $Post_t$ is a dummy equal to one in year 1995 and later. The δ_{zt} variables reflect zipcode-by-year fixed effects. Our outcome variables Y_{kzt} include the number of renters and owners living in the building, as well as the number of renters living in a building subject to rent control. All of these are divided by the average number of building residents between 1990 and 1994 to adjust for different sized properties. We also study the impact of the law on the number of renovation permits associated with the building, and whether the building is ever converted to a condo.

We estimate the above regression separately among properties with and without corporate landlords. These results are reported in Columns 1 and 2 of Table 1. Our companion paper, (Diamond, McQuade and Qian 2018a), showed that treated buildings ultimately had fewer renters and more owners residing in the building. We further showed that the number of renters living in rent-controlled units declined due to property redevelopment. Table 1 shows that these effects are much more pronounced among properties initially owned by corporate landlords.

Treated buildings with individual landlords experienced a 11.3% decline in the number of renters resident in the building, relative to the 1990-1994 average population at the parcel, and a 6.9% increase in the number of resident owners. In contrast, buildings with a corporate landlord experienced a 39.9% decline in the number of resident renters, an approximate 3.5x increase relative to buildings with individual landlords. Moreover, buildings with corporate landlords experienced a larger increase in the number of resident owners at 10.4%. Thus, the reduction in rental supply is largely driven by corporate landlords.

Treated buildings with corporate landlords were also much more likely to redevelop and thus avoid the requirements of the rent control law. Among buildings with individual landlords, there was a 17.0% decline in the number of renters living in rent-controlled units. Strikingly, among buildings with corporate landlords, we estimate a 63.7% decline in the number of renters living in rent-controlled units. Consistent with these findings, we find a 3.1% increase in the population of renters living in redeveloped buildings among individual landlords. For corporate landlords, this estimate is 20.4%. Also consistent with increased redevelopment, there is a 15.3% increase in renovation permits associated with treated buildings with corporate landlords, but only a 4.2% increase among buildings with individual landlords. The only place where we see individual landlords being more aggressive is in condo con-This is likely due to the fact versions. that individual landlords were more likely to be exempt from the San Francisco condo conversion lottery restrictions than corporate landlords.¹ Of course, despite this increased condo conversion by individual landlords, we still find that treated buildings with corporate landlords see larger decreases in resident renters and larger increases in resident owners.²

Our results are consistent with the idea that corporate landlords, who have sufficient access to capital, engage in the construction and renovations needed to exempt their properties from the rent control statutes. In this way, given the endogenous responses of corporate landlords, our results suggest that the rent control law is somewhat regressive, with the burdens of the law being borne by smaller, mom-and-pop individual landlords.

In columns (3)-(4) of Table 1, we also investigate whether there is any heterogeneity in landlord response based on racial minority status. While there is some evidence that parcels managed by white landlords experienced a larger increase in resident owners due to the law than parcels managed by minority landlords, in general, there does not appear to be substantive differences between white and minority landlords. The overall supply reduction is largely consistent between the two groups.

¹Multifamily buildings satisfying certain owneroccupancy requirements were exempt from the lottery process.

²Landlords can also replace renters with resident owners in existing structures by selling the property as a TIC.

Table 1—Treatment Effect for Multi-Family Residence (2-4 Units) by Landlord Type

	Landlord Type		Landlord Race	
	(1)	(2)	(3)	(4)
	Individual	Corporate	White	Minority
Renters/Avg Pop 90–94	-0.113	433	-0.154	-0.117
	(0.079)	(0.234)	(0.126)	(0.135)
Renters in Rent-Controlled	-0.139	-0.637	-0.178	-0.165
Buildings/Avg Pop 90–94	(0.083)	(0.234)	(0.122)	(0.108)
Renters in Redeveloped Buildings	0.031	0.204	0.024	0.039
	(0.026)	(0.027)	(0.050)	(0.012)
Owners/Avg Pop 90–94	0.069	0.104	0.142	-0.006
	(0.046)	(0.061)	(0.063)	(0.067)
Conversion	0.078	0.044	0.105	0.032
	(0.007)	(0.016)	(0.010)	(0.007)
Cumulative Permits	0.042	0.153	0.032	0.052
per Unit	(0.014)	(0.056)	(0.022)	(0.017)
Number of Properties	25,701	2,403	18,706	6995
(Share)	(0.915)	(0.085)	(0.666)	(0.249)

Notes: The sample consists of all parcels that are multi-family residence with 2–4 units in San Francisco built during 1900–1990 which can be matched to individual or corporate landlords. Table reports the average treatment effects for various parcel level outcomes in the post–2006 period. Standard errors in parentheses are clustered at the parcel level. In Columns (1) and (2), we divide parcels by whether they have individual or corporate landlords. In Columns (3) and (4), we further divide all parcels with individual landlords by their race.

IV. Conclusion

In our previous work, (Diamond, Mc-Quade and Qian 2018a), we showed that the expansion of rent control in San Francisco led to a long-run decrease in the supply of rental housing. This paper shows that this supply reduction is much more pronounced among multifamily housing managed by corporate landlords, as opposed to individual landlords. Raising revenue for rental subsidies through rent control appears to be regressive, since corporations can evade the tax burden of rent control more easily, likely due to their superior access to capital. If cities and states desire to insure renters against neighborhood price increases, these subsidies may be more efficiently provided through a tax subsidy funded through traditional taxation. This would enable the government to use a much more flexibly policy instrument to raise the needed revenue and also target the rental subsidies at those who need it the most.

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Online Appendix

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Landlord Classification

For the small multi-family apartment buildings with two to four units in our sample, we link their official parcel numbers from the San Francisco Assessor's office to property ID numbers from DataQuick, hereinafter refer to as properties. We then use both detailed historical transaction records and current owners provided by DataQuick to match properties to their owners on December 31st, 1993. Specifically, we identify all buyers who bought a property before December 31st, 1993 (15.3% of the properties in our sample), all sellers who sold a property after December 31st, 1993 (41.9% of the properties in our sample), and the current owners (99.6% of the properties in our sample). Buyers and sellers are identified from the set of arms-length transactions that are not refinances or home equity loans.

We first clean names of buyers, sellers and current owners as follows:

- We standardize the names of past buyers, sellers and current property owners by removing special characters, dates, suffixes such as "JR" and "SR", and numerals such as "II", "III" and "IV" that often appear at the end of first and last names. We also remove any lone letters in names which are most likely initials (in most cases, middle initials).
- By identifying words that appear most frequently in names such as "properties", "portfolio", "investment", "associates", "management", etc., we classify the names of past buyers, sellers and current property owners into individuals vs. corporates. Words such as "trust", "estate", and "family partnership" also appear frequently in names, indicating the ownership of a property under a family trust, estate or partnership. We classify such names as individuals by stripping any words that are not part of the names of beneficiaries.
- For individuals including trusts/estates/family partnerships, we identify their first and last names from as many patterns of recording names as we could detect. Examples of common patterns of names include "MORET,DAVID", "MCCARTHY,MATTHEW & KELLY", "BETTY RUSSELL", "CLARK,POWELL TR", "BYRD,MARGUERITE EST" and "JAMES WONG ESTATE", etc.

We then apply multiple steps to match properties to their owners on December 31st, 1993. In each step, properties enter a match round only if they have not already been matched to an owner in an earlier round. The share of properties matched in each round is documented below.

- 1) Last individual or corporate buyer of a property before December 31st, 1993 who sold the property after December 31st, 1993 we are certain they are the owners of properties on December 31st, 1993. 5.75% of the properties in our sample are matched to at least one owner in this step.
- 2) Current individual or corporate owner of a property who bought the property before December 31st, 1993 we are certain they are the owners of properties on December 31st, 1993. This step increase the share of properties with matched owners to 11.0%.
- 3) First individual or corporate seller of a property after December 31st, 1993 who we never observe as a buyer before December 31st, 1993, and no one transacts at the property before December 31st, 1993 it is likely that the purchase of the property dated back to before our transaction records from DataQuick started in 1988. We are

quite confident they are the owners of the properties on December 31st, 1993. This step increase the share of properties with matched owners to 44.7%.

- 4) First individual or corporate seller of a property after December 31st, 1993 who we never observe as a buyer before December 31st, 1993, but someone else transacts at the property before December 31st, 1993 it is still likely that the purchase of the property dated back to before our transaction records from DataQuick started, although we are less certain in this case. Assuming they are the owners increases the share of properties with matched owners to 46.9%.
- 5) Current individual or corporate owner of a property, and we do not observe anyone who transacts at the property it is likely that they are the owners of the property on December 31st, 1993 but their transactions dated back to before our transaction records from DataQuick started. Adding these owners increases the share of properties with matched owners to 97.7%.
- 6) Last individual or corporate buyer of a property before December 31st, 1993 who we never observe as a seller after December 31st, 1993 and is not the current owner, and no one else transacts at the property after December 31st, 1993 we assume they are still the current owners and likely owners back on December 31st, 1993. Adding these owners increases the share of properties with matched owners to 99.8%.

Next we classify the landlords of the parcels in our sample into individual vs. corporate. For individual landlords, we further classify their race. Note it is possible for a parcel number to be linked with more than one property³ and for a property to be matched to multiple individual or/and corporate owners. A parcel is classified to have individual landlords if all of its matched owners are individuals; it is classified to have corporate landlords if at least one of its matched owners is corporate.

For individual landlords, we use "NamePrism", a non-commercial ethnicity/nationality classification tool intended to support academic research (Ye et al. (2017)), to compute probabilities of race/ethnicity for each landlord based on her first name and last name. For each individual landlord, "NamePrism" outputs the probabilities for the six ethnic categories defined by U.S. Census Bureau: Hispanic; non-Hispanic White, non-Hispanic Black or African American, non-Hispanic Asian/Pacific Islander, non-Hispanic American Indian and Alaska Native, and non-Hispanic Multi-racial. An individual landlord's race is given by the racial category with the highest probability. We further group the racial categories into non-Hispanic White and Minorities. A parcel is classified to have white individual landlords if it only has individual landlords and at least of them is white; it is classified to have minority individual landlords if it only has individual landlords who are minorities. Table 1 shows the breakdown of landlord types for our sample of analysis.

 $^{^385.4\%}$ of the parcels are linked to a unique property from DataQuick and 91.4% of parcels are linked to no more than two properties.