





Discussion of
“Mortgage Rates and Rents:
Evidence from Local Mortgage
Lock-In Effects”

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Conceptual “Model” of Housing Lifecycle

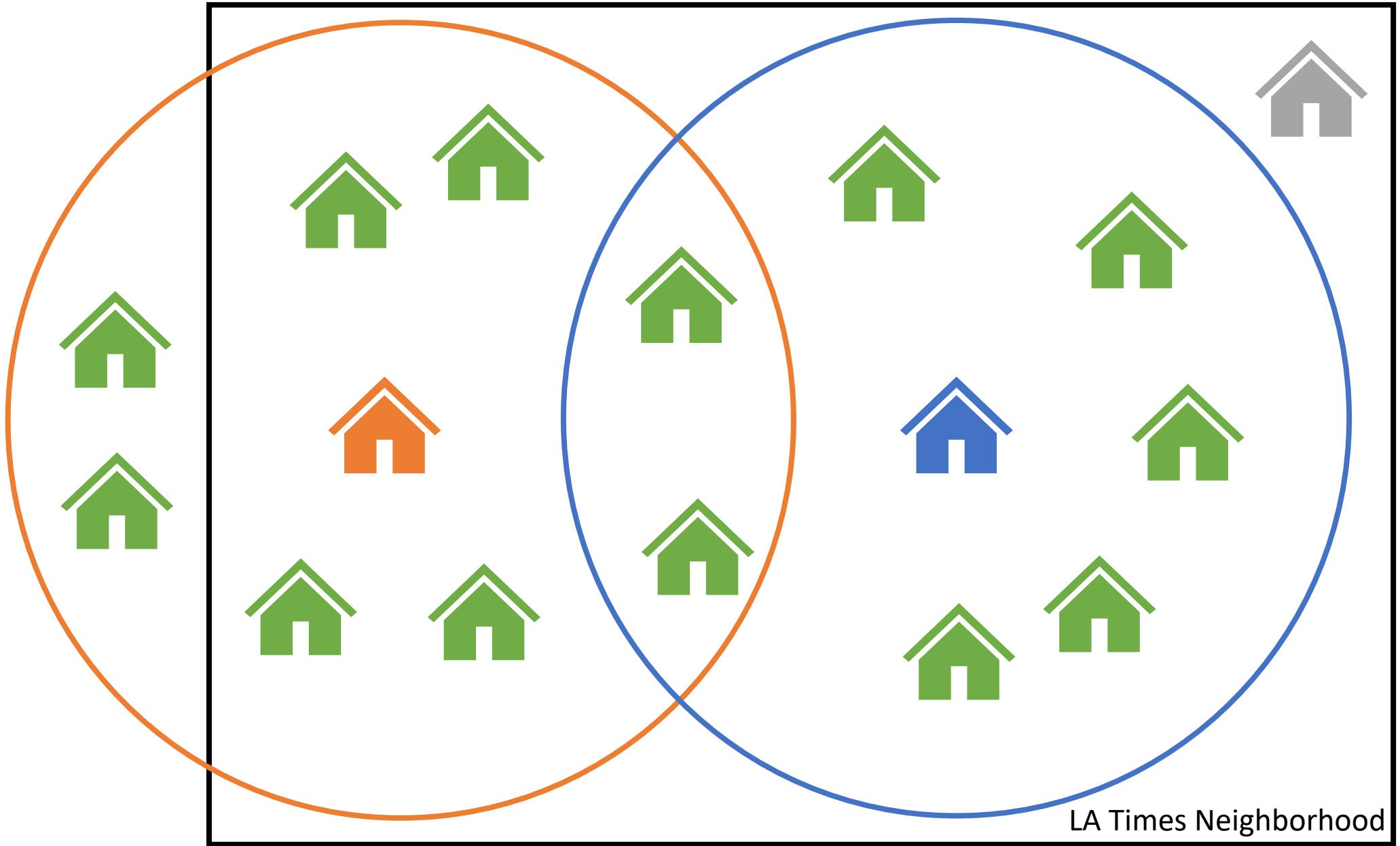
- Inspired by Fonseca, Liu, and Mabilie (2024)’s average path
 - “Born” as a renter
 - Eventually buy a starter home
 - Then, upgrade to a “step-up home”
 - Finally, downsize
- Direct effect of lock-in: homeowners stay put
 - Starter homeowners don’t buy step-ups
 - → don’t vacate the home that renters were going to buy → net demand  → house prices 
- Higher house prices + higher mortgage rates: fewer transitions into homeownership
 - Renters “locked into” the rental market indirectly
 - → net demand for rental units  → rents 
- Prediction: markets with larger *current rate – origination rate* gaps will have higher rental prices

Cross-Sectional Test of the Prediction

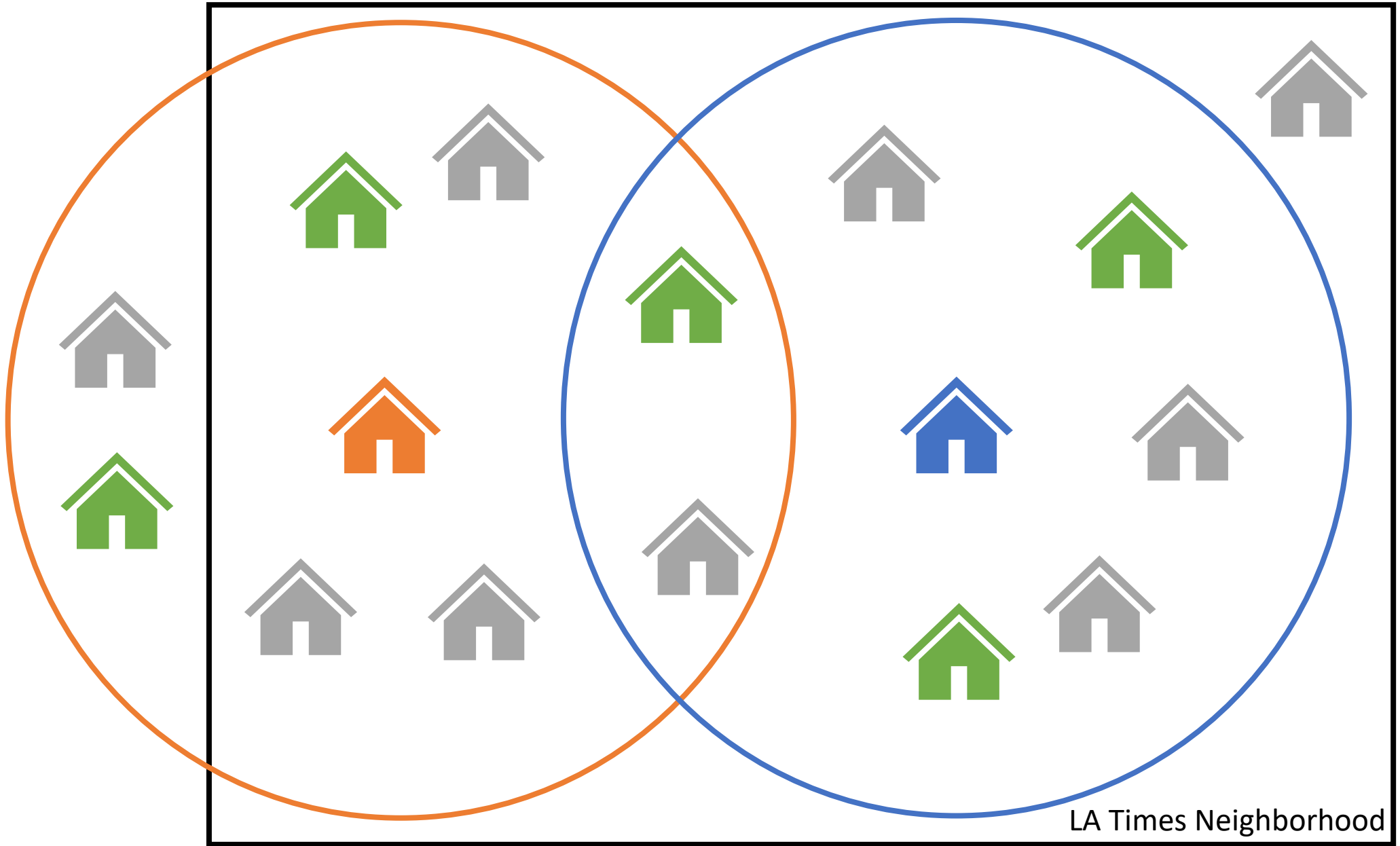
- Two Similar Houses Up For Rent in Sep 2022



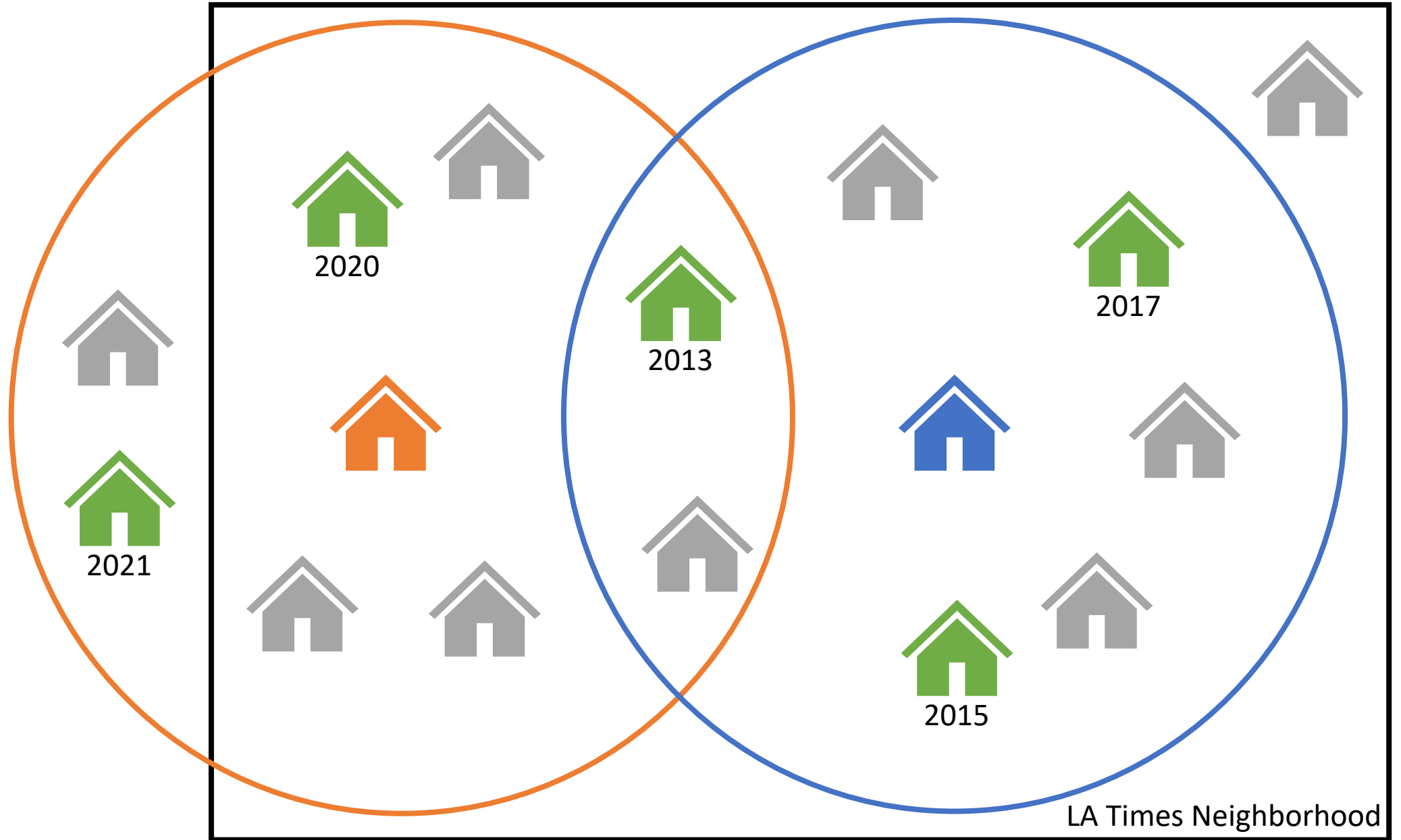




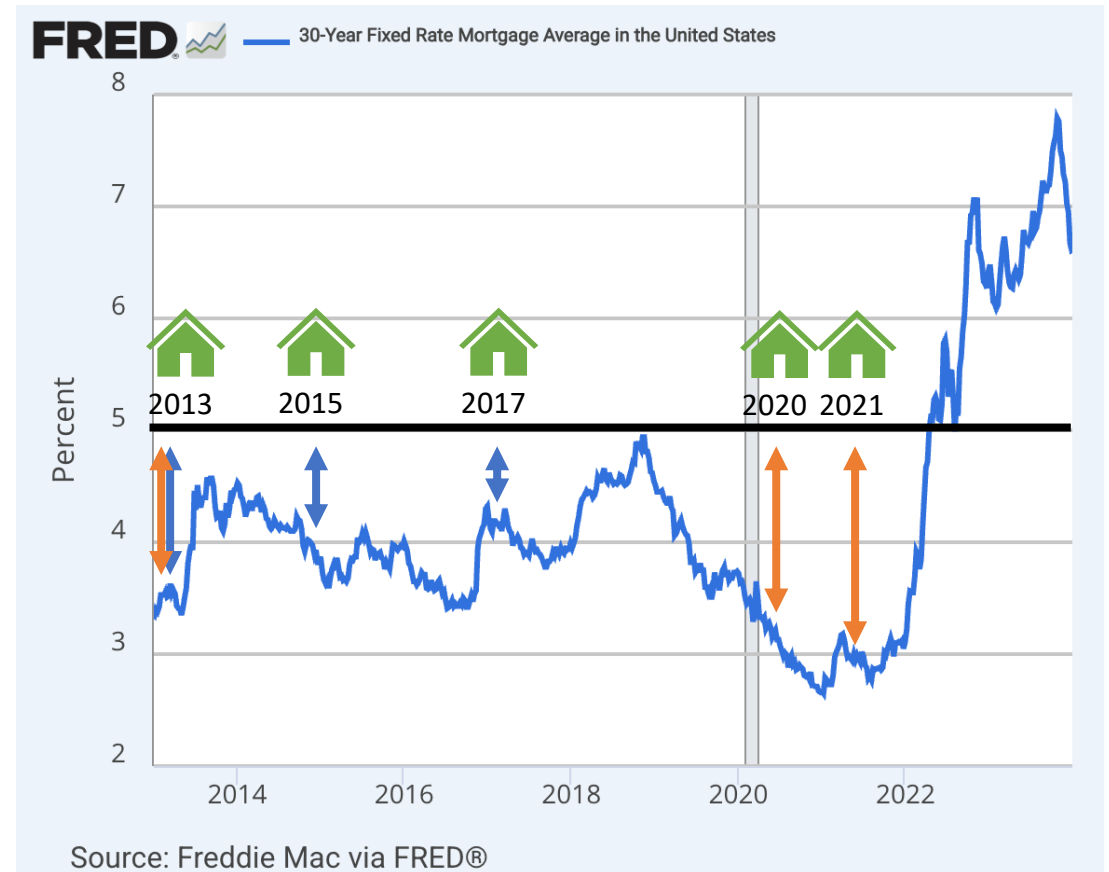
LA Times Neighborhood



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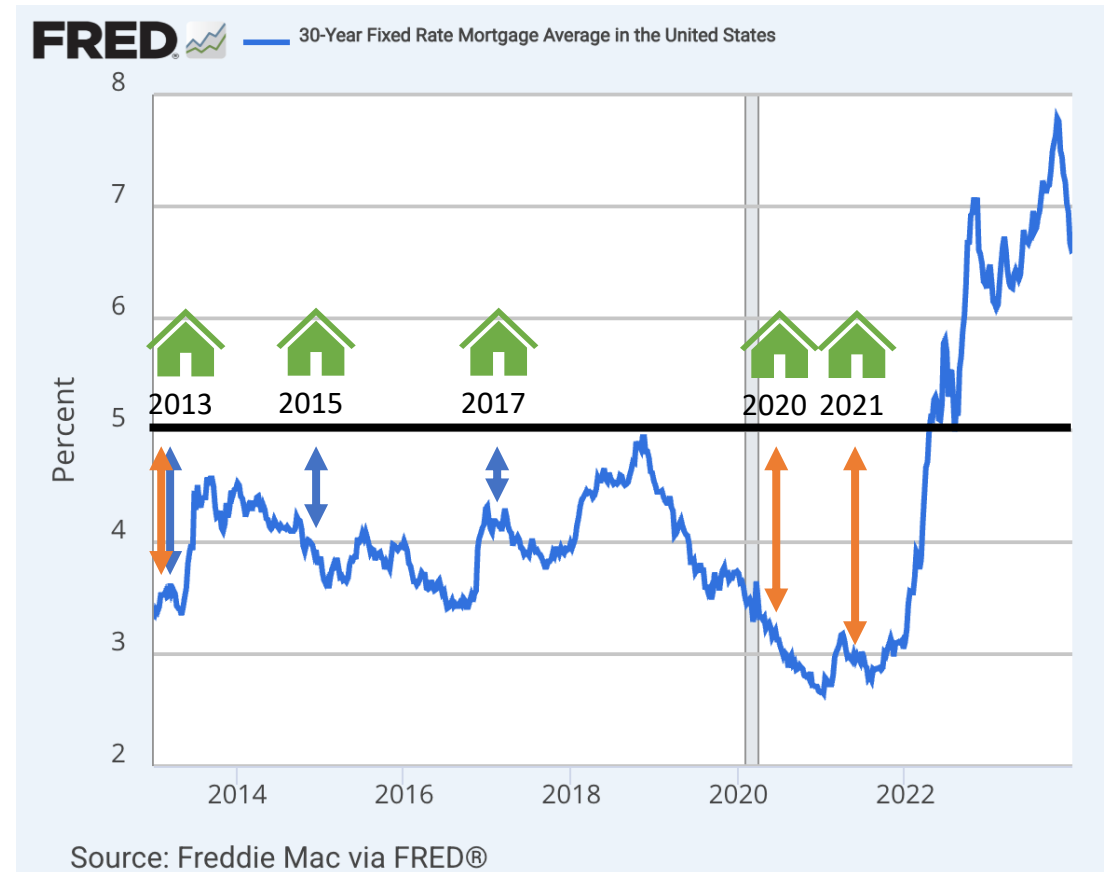


- **Orange house** neighbors bought their houses when mortgage rates were low
 - more “locked in” than **blue house** neighbors
- **Finding: orange house is more expensive to rent**



Mechanism

- Homeowners who bought in 2015 and 2017 are more likely to move than 2020/2021 buyers
- Larger potential **purchase** inventory in the **blue sub-neighborhood**
- Less competition for rental units
- Lower rents



Large effect!

- When rental unit A is surrounded by houses whose owners would have to pay 10% more per month to buy the same house today than a rental unit B's neighbors, A's asking rent is 3.5% higher than B's
- Specifications without time fixed effects less convincing, I think
 - But why are 2021-2023 estimates lower?

Table 2: Mortgage Lock-In ($LockPayGap_{0.5ml}$) Effects on Rents

	(1) 2014-2023	(2) 2014-2023 Multi-Family	(3) 2021-2023	(4) 2021-2023 Multi-Family	(5) 2014-2023
$LockPayGap_{0.5ml}$	0.599*** (10.79)	0.508*** (10.72)	0.263*** (19.95)	0.263*** (15.90)	0.347** (2.25)
Census Tract FE	YES	NO	YES	NO	YES
Building FE	NO	YES	NO	YES	NO
YM × Neighbor FE	NO	NO	NO	NO	YES
Average Rent (\$)	2,825	2,346	3,201	2,790	2,825
R-Square adj	0.824	0.915	0.817	0.919	0.857
N	3010270	876796	520553	127399	3118337

Notes: The Table shows coefficients estimates from different specifications of equations (3) in columns (1) to (4), and equation (4) in column (5). The dependent variable is log asking rent for a sample rental listing in Los Angeles County. $LockPayGap_{0.5ml}$ is the monthly payment gap in the 0.5-mile radius surrounding each listing. T-stats are reported in parentheses and are bases on standard errors clustered by neighborhood and year-quarter.

Mapping “Model” to Data

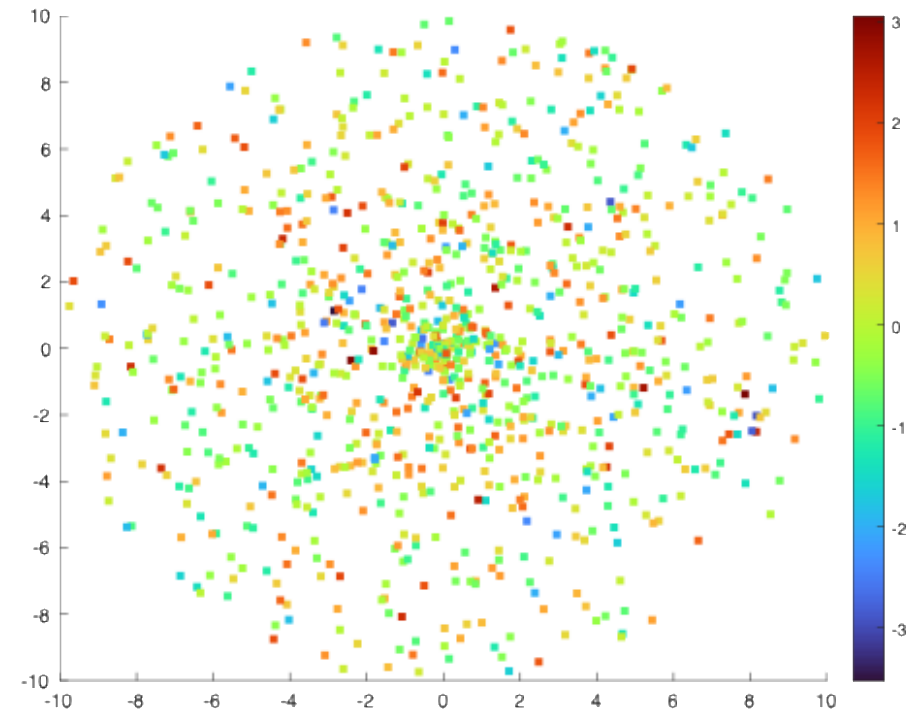
- State variable: degree of lock-in
- Empirical test uses the panel of LA housing markets
 - Market := Every 0.5mi circle around every rental in every neighborhood in every month
 - Every market has a different realization of the state variable
 - Both geography and time series act as sources of empirical variation
- To identify the “model” parameters using this test, need to assume that
 1. Degree of lock-in is the only difference between markets (after controlling for observables)
 2. No substitution between markets (either across geography or across time)

1. Omitted Variables

- **Neighborhood X Time Fixed Effects:** residual variation in last transaction date of nearby houses is spatial and very local
- Example: west side of the neighborhood has better green spaces
 - Made houses there more sought-after by families with kids during covid (2020-21)
 - More turnover at the time of low interest rates → more lock-in
 - Still more sought after by those in the rental stage of lifecycle → higher rent
- Argument against: lack of Moran's spatial autocorrelation
 - In my example, lock-in would gradually decrease as you get further east. It doesn't.
 - Or does it? Spatial correlation in lock-in at house vs. market level...
 - Which fixed effects to include? The owned house's neighborhood or the rental's?
 - More directly measure transmission of housing → market dispersion in lock-in

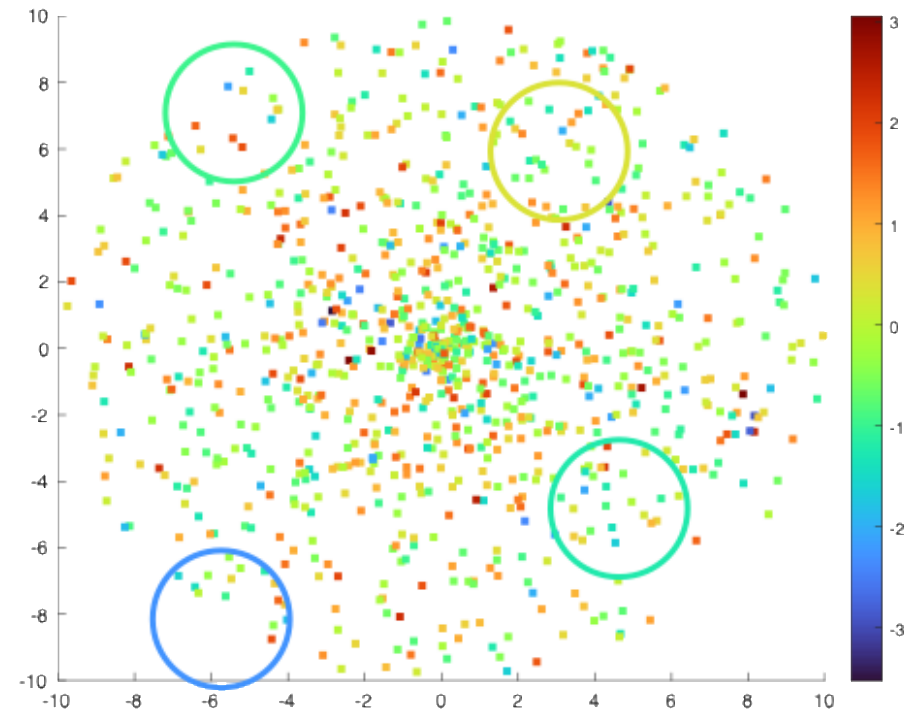
Implications of Spatial Correlation

- Null hypothesis: timing of housing purchases (and hence lock-in) randomly spatially assigned
- Then, variation in market-level lock-in is due to granularity
- Geographically broader market → smaller variation
- Simulate under the null
- Compare to data – less steep descent is evidence of spatial corr.



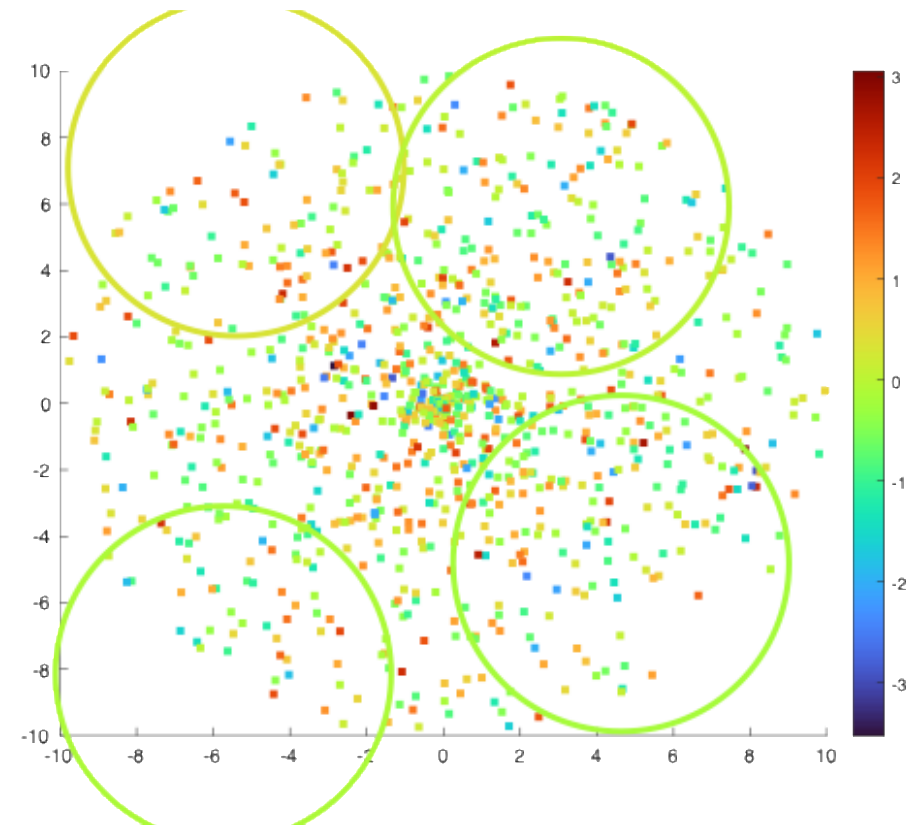
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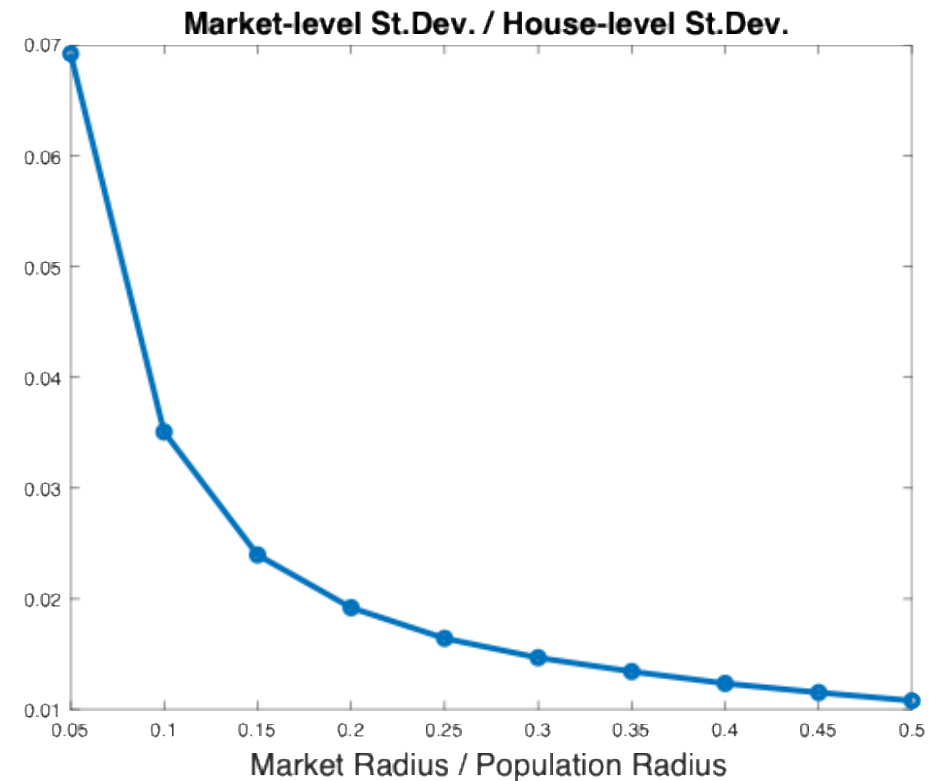
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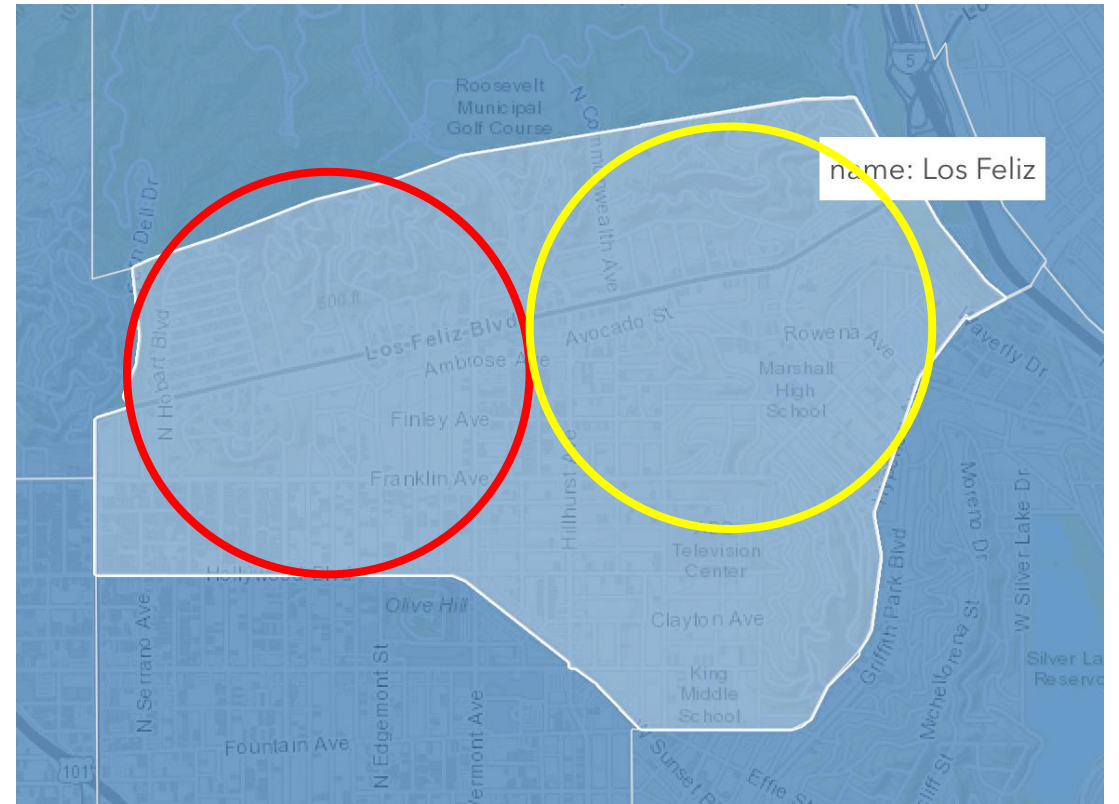
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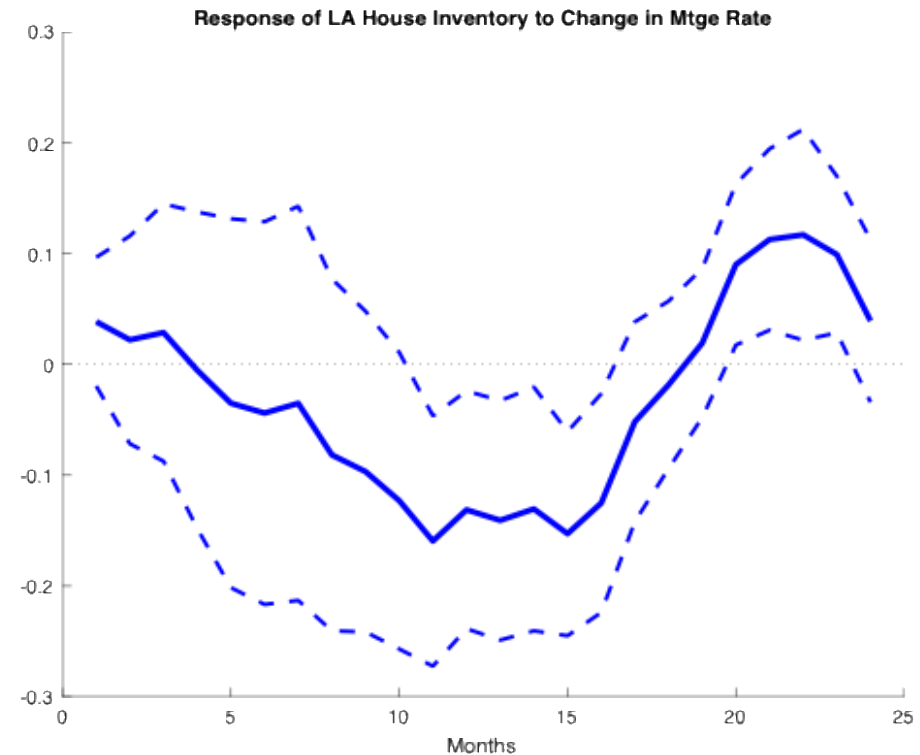
2. Substitution Across Space

- What is the elasticity of substitution between the **west** and the **east** markets (sub-neighborhoods of Los Feliz)?
 - Probably not 0
- Higher lock-in in west should drive up prices and rents in east as well
- Paper's estimates are a lower bound of the aggregate effect
- By how much?



2. Substitution Across Time

- Response of housing inventory to mortgage rates has complex dynamics
- Expect ongoing decline in inventory?
 - Rush to buy/rent now → static analysis overstates effect
- Expect mean reversion?
 - Wait → static analysis understates effect



Prop 13: Another Kind of Lock In

- In CA, property taxes only get reset at purchase
- House price appreciation creates an asset
 - = PV [tax rate * (current price – adjusted purchase price)]
 - Asset lost upon sale
 - Reason not to sell
 - Reason to rent out → increase in rental supply?
- Does not get absorbed by fixed effects → include as control

HPA To 2023 From:	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
3 South Los Angeles	171%	133%	132%	111%	80%	39%	35%	23%	9%	4%	1%
4 Southeast Los Angeles	186%	144%	137%	117%	82%	45%	39%	27%	14%	7%	2%
4 Hollywood	63%	47%	50%	43%	27%	5%	6%	-1%	-8%	-8%	-6%
3 North Hollywood	129%	107%	113%	97%	74%	41%	40%	26%	11%	6%	2%
1 Van Nuys	153%	128%	132%	113%	85%	51%	48%	31%	16%	8%	3%
9 Mid City	96%	73%	80%	70%	51%	17%	18%	8%	-1%	-4%	-4%
3 Sylmar	143%	118%	117%	103%	80%	52%	47%	32%	17%	10%	4%
4 San Pedro	89%	78%	84%	74%	56%	35%	35%	25%	10%	4%	0%
1 Northridge	118%	103%	109%	97%	78%	55%	53%	36%	17%	10%	4%
5 Woodland Hills	118%	104%	113%	100%	81%	56%	54%	38%	18%	9%	3%
2 Boyle Heights	176%	136%	135%	112%	82%	42%	38%	25%	14%	6%	2%
2 Sherman Oaks	112%	96%	107%	94%	74%	43%	43%	29%	11%	4%	0%
3 Pacoima	164%	130%	130%	112%	84%	52%	49%	33%	19%	9%	5%
3 Koreatown	65%	48%	48%	39%	24%	3%	5%	0%	-5%	-4%	-3%
5 Westlake	90%	66%	65%	56%	36%	12%	14%	6%	1%	-4%	-3%
2 Reseda	142%	120%	125%	109%	83%	52%	49%	34%	17%	9%	4%
3 Panorama City	171%	135%	138%	118%	88%	52%	48%	35%	18%	9%	2%

Neighborhood and Year of Purchase create substantial variation in “Prop 13 Lock In”

Corr(Prop 13 Lock In, Mortgage Lock In) = ?

Conclusion

- Prevalence of fixed rate mortgages in the U.S. creates a unique challenge for monetary policymakers as they raise rates
- “Lock in” affects not just homeowners/buyers but also renters
 - Who tend to be younger and lower income → implications for inequality
- Convincing evidence of spillovers into rental markets
- Highly recommend you read the paper!