Behavioral Responses to Taxation of Inherited Property

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Research Question(s)

1. How elastic are parents to changes in taxation of inherited property?
2. Which groups are most elastic?
3. What are the implications for theories on gift and bequest taxation?

Setting

- Prop. 19 (2020): Eliminated child's ability to inherit their parents' house's low property tax rate via its *base value*

- Example: Home in 2000 bought for $500,000, worth $1.5 million in 2020
  - Home is taxed at its purchased (base) value +2% per year (∼$740k)
  - **Base value can be inherited with the home until Feb. 2021**
    - After, upon inheritance it is reassessed to market value ($1.5m)
    - Difference in annual taxes in 2020: $7,430 vs. $15,000
  - Parents must rush to transfer house before the deadline

- Unique setting because parents are gifting a real asset.

Ex. Would You Give Your Home to Your Child Today...

(a) 1819 Baker St, San Francisco

(b) 2631 Baker St, San Francisco

...to save them \$1,600 (+2%/yr) in annual taxes?

...to save them \$11,500 (+2%/yr) in annual taxes?

Preview of Findings

- Document a large mass of transfers—particularly in wealthy areas
- Large behavioral responses to tax change in SF and LA: $e > 700$
- Effectively delayed revenue gains from the implementation of the law by **18** months (SF) and **13** months (LA)

Literature

- Proposition 13 lock-in: Wasi and White (2005); Ferreira (2010)
- Gift and estate taxation: Glogowsky (2021); Escobar et al. (2019); Goupille-Lebret and Infante (2018); Mas-Montserrat (2018); Kopczuk (2016, 2013); Joulfaian and McGarry (2004); Poterba (2001); McGarry (2001); Kopczuk and Slemrod (2000)
  - + Theory of optimal inheritance taxation: Piketty and Saez (2013)
- Timing of inheritance transfers: Bernheim et al. (2004); Joulfaian (2005); Locks (2023)
  - + Investment in durable assets: House and Shapiro (2008)
- Property tax regressivity: Avenancio-León and Howard (2022); Amornsiripanitch (2020)

Outline

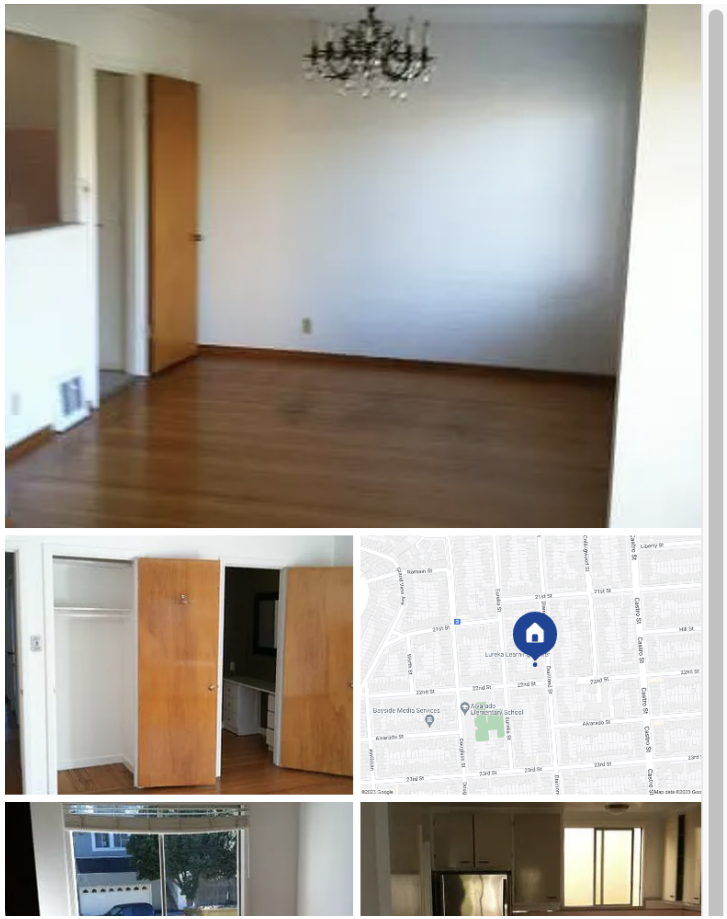
Background: Property Taxes in CA

- **Old System**: pre-Prop 19
  - Annual reassessment of property restricted to no more than 2% per year
  - Property is reassessed to market value when the ownership changes
  - Parent-child property transfers allowed without reassessment

- **New System**: post-Prop 19 (2020)
  - Eliminates reassessment exemption for most parent-child property transfers
  - Meant to increase property tax revenue
  - Exemptions: principal-to-principal property transfers up to \$1m + base value
  - **Passed (51.1%) November 2020, effective February 2021**

- Property taxes are typically fixed at $\sim$1% of assessed value

Motivation: Market vs. Assessed Value in CA



Zillow Edit Save Share

2 bd | 1.5 ba | 1,750 sqft

480 Diamond St, San Francisco, CA 94114

Off market Zestimate®: **$1,849,700** Rent Zestimate®: **$5,994**

Est. refi payment: $10,499/mo $ **Refinance your loan**

Home value | Owner tools | Home details | Neighborhood details

Public tax history

Year	Property Taxes	Tax Assessment
2022	$1,752 (+2.1%)	$82,024 (+2%)
2021	$1,717 (-4.4%)	$80,416 (+1%)
2020	$1,796 (+6.1%)	$79,593 (+2%)

- $\tau = \mathbf{0.09\%} << 1\%$

Motivation: Transfers Flood In

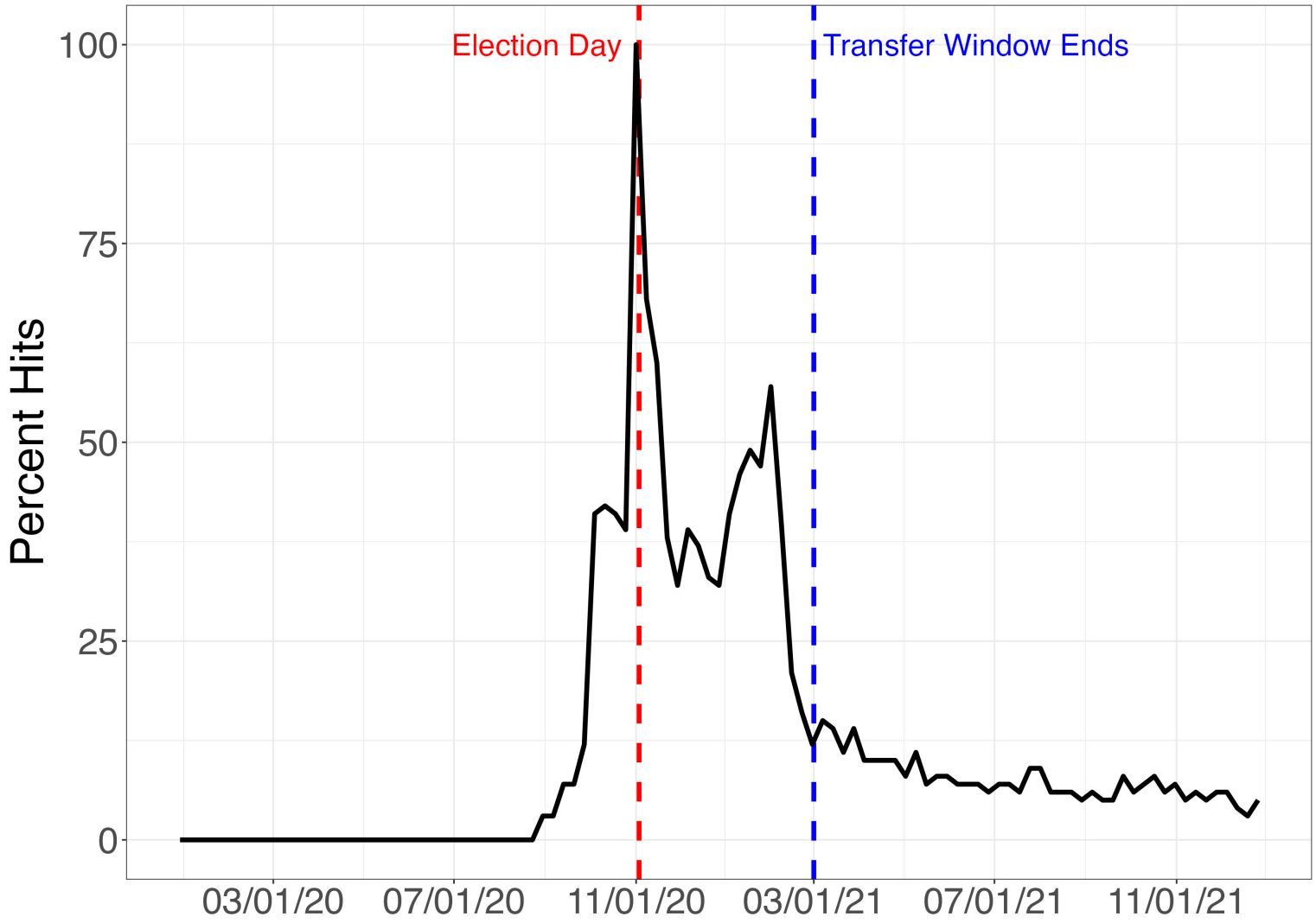
California's new Prop. 19 property-transfer law spurs flood of family filings

SLIDE 1 OF 4

A real estate sign is shown in front of a home for sale in San Francisco on Feb. 18, 2020. Californians approved a ballot measure that adds and strips exemptions to property taxes, giving more breaks to seniors, disabled and wildfire victims when they move and taking them away from people who turn inheritances into investment homes. Proposition 19, which received 51% of the votes, is expected to produce additional revenue for schools, local governments and firefighting districts. (AP Photo/Jeff Chiu, File)

Figure: North Bay Business Journal, May 2021

Motivation: Google Trends



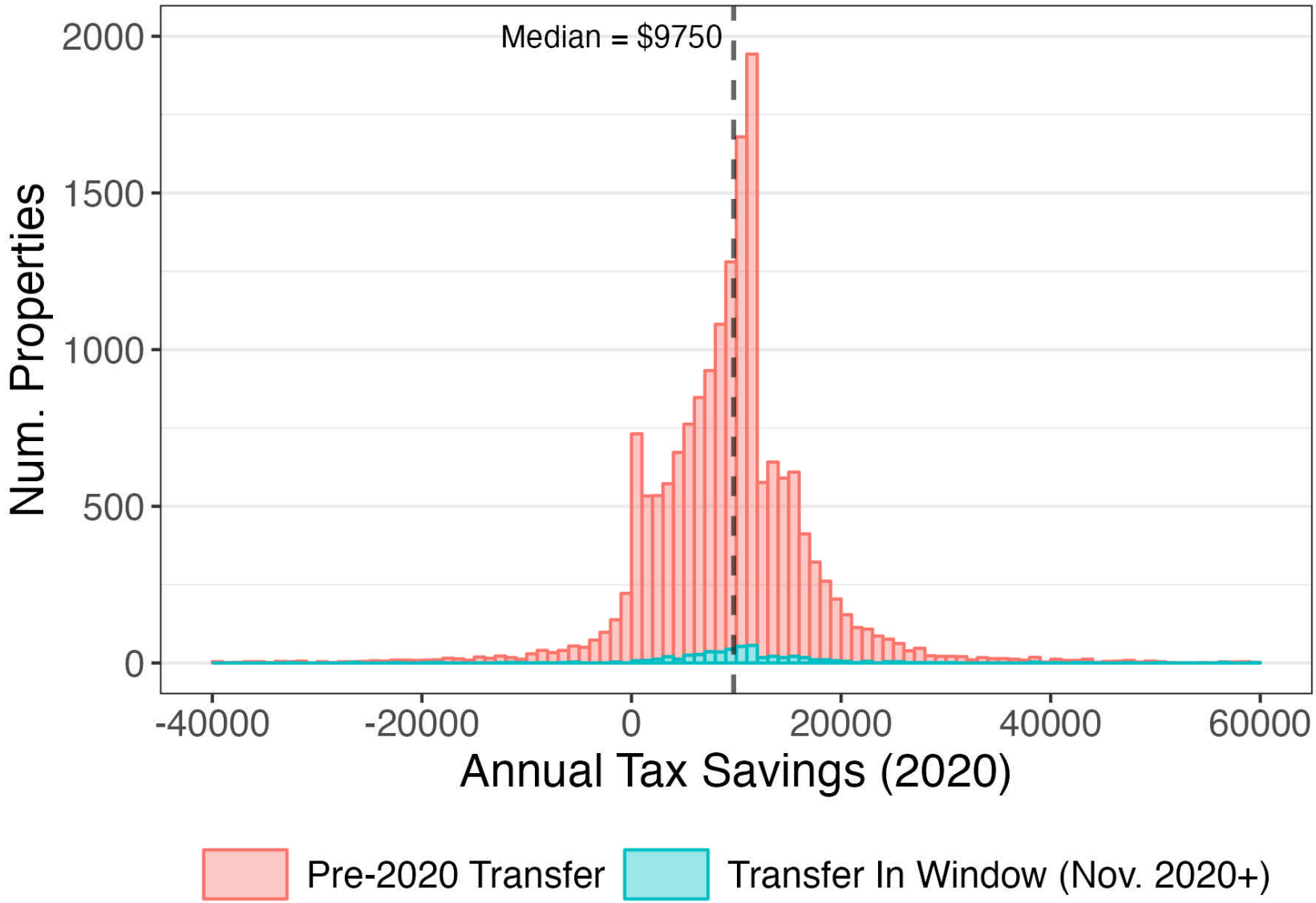
California Proposition 19, Property Tax Transfers, Exemptions, and Revenue for Wildfire Agencies and Counties Amendment (2020)

Data

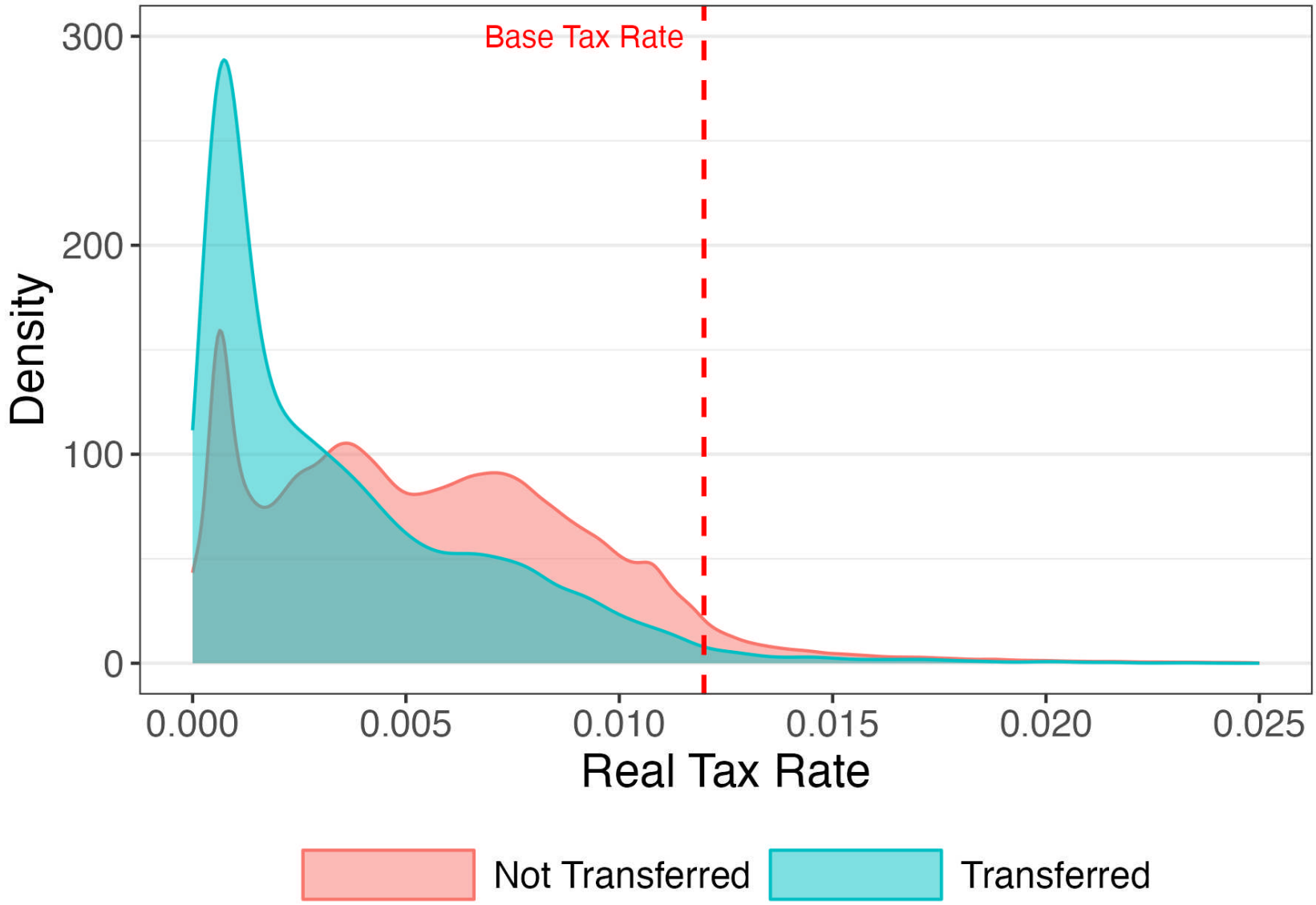
- County-level assessor data on properties (i.e. property characteristics) [2015–2022];
  - For SF County, the universe of properties;
  - For LA County, properties ever transferred;
- County-level transfer data (i.e. property, date, type of transfer, type of property);
- Zillow data on market-level property valuation;
- Expanding to other counties.

Outline

Annual Tax Savings in 2020 for SF County



Average Effective Tax Rate in SF



- Very low **real** tax rates, particularly for long-held (transferred)

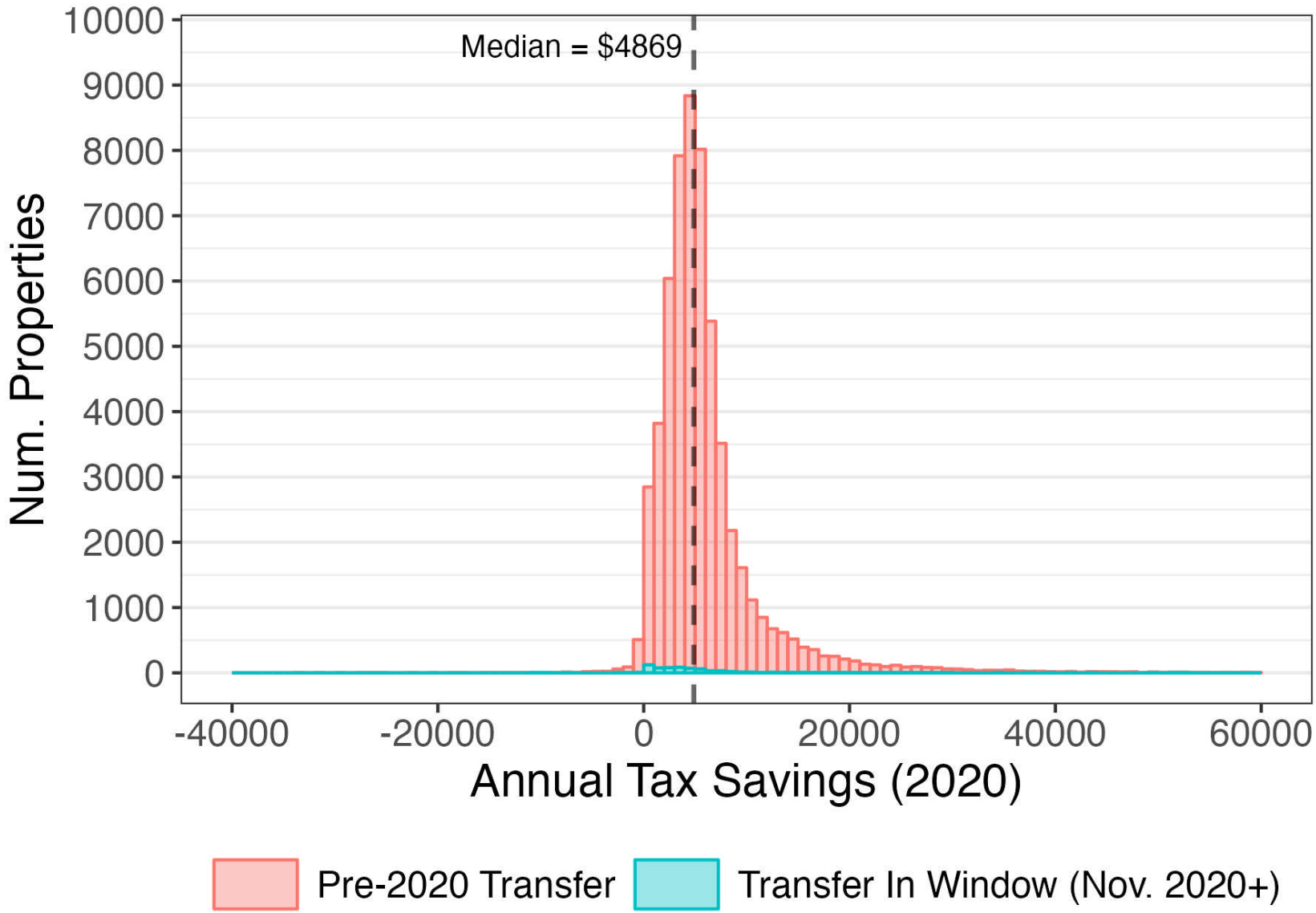
Summary Stats in SF

Table: Summary Statistics, 2019-2021

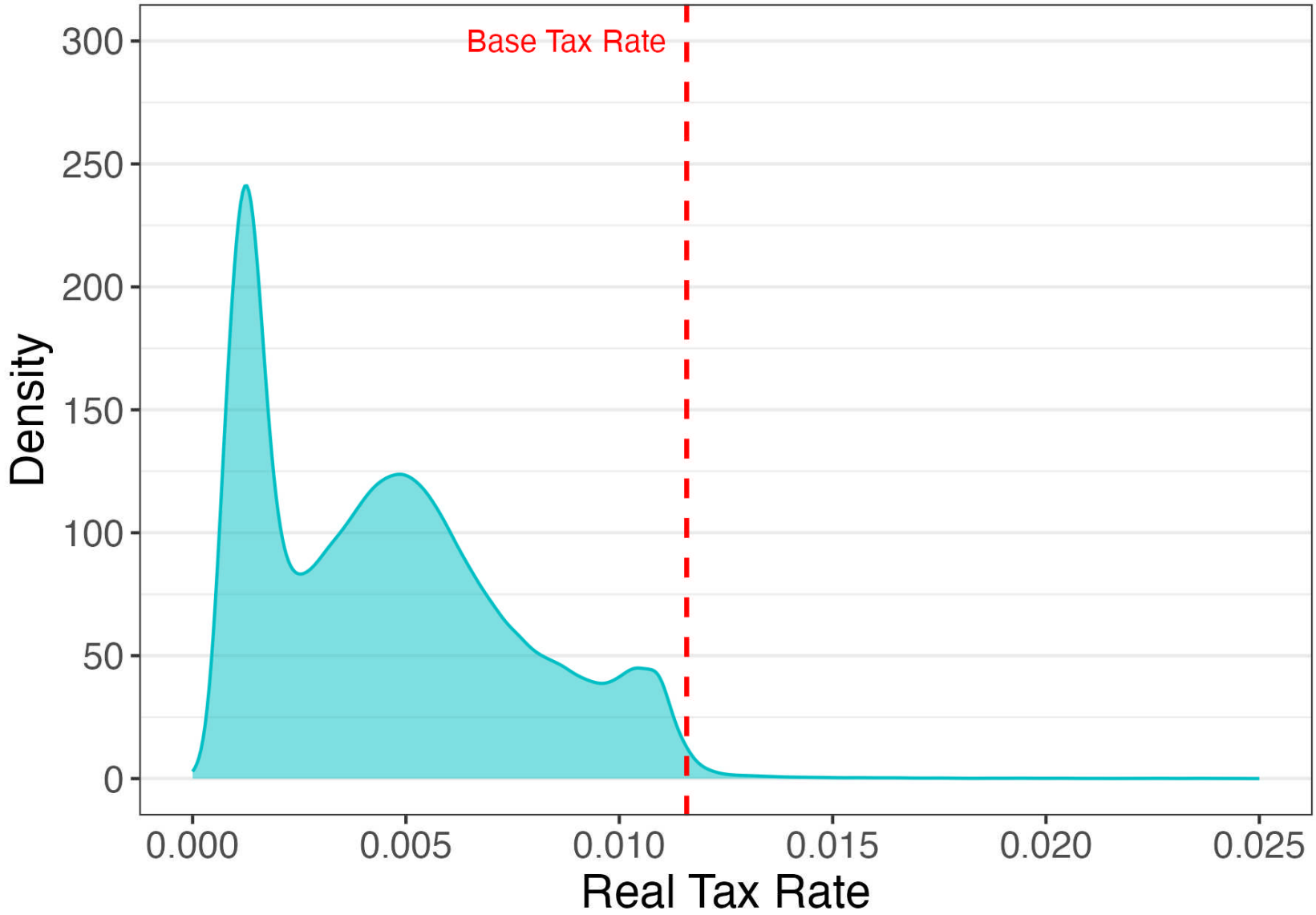
Group	Property	Percent	Value (Million USD)			Tax Rate
			Market	Taxable	Untaxed	
Transfer non-Window			1.38	0.38	1.00	0.33%
Transfer in Window			1.52	0.47	1.05	0.37%
No Transfer			1.50	0.70	0.80	0.56%
Transfer non-Window	Principal	52%	1.40	0.32	1.08	0.27%
Transfer non-Window	Non-Principal	48%	1.36	0.46	0.90	0.4%
Transfer in Window	Principal	39%	1.59	0.45	1.14	0.34%
Transfer in Window	Non-Principal	61%	1.47	0.48	0.99	0.39%

- Non-principal home share increases from 48% to 61% in window
- Average untaxed value $\sim$\$1m
- Effective tax rates (= property taxes / *market value*) are well below 1%

Annual Tax Savings in 2020 for LA County



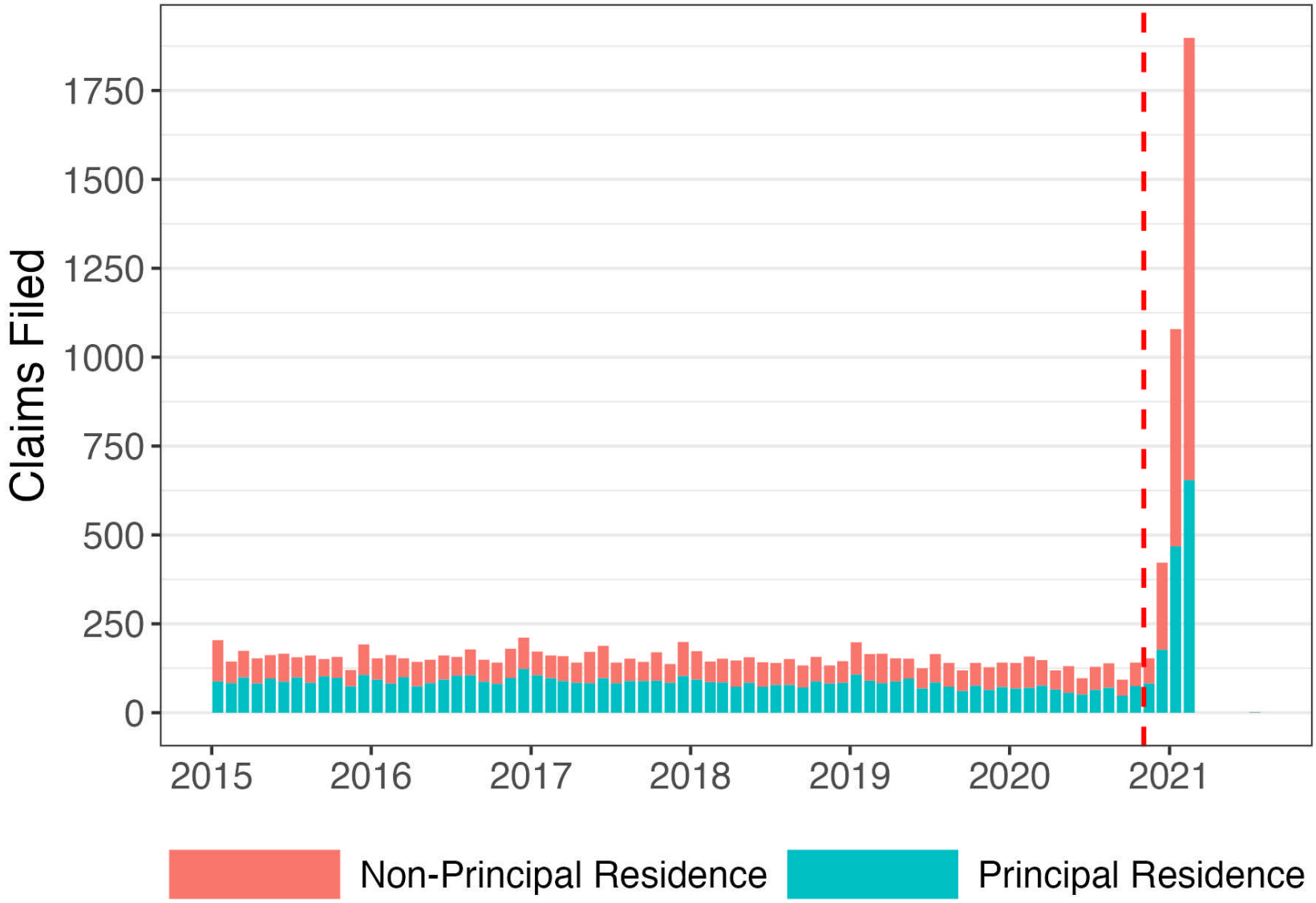
Average Effective Tax Rate in LA



- Very low **real** tax rates

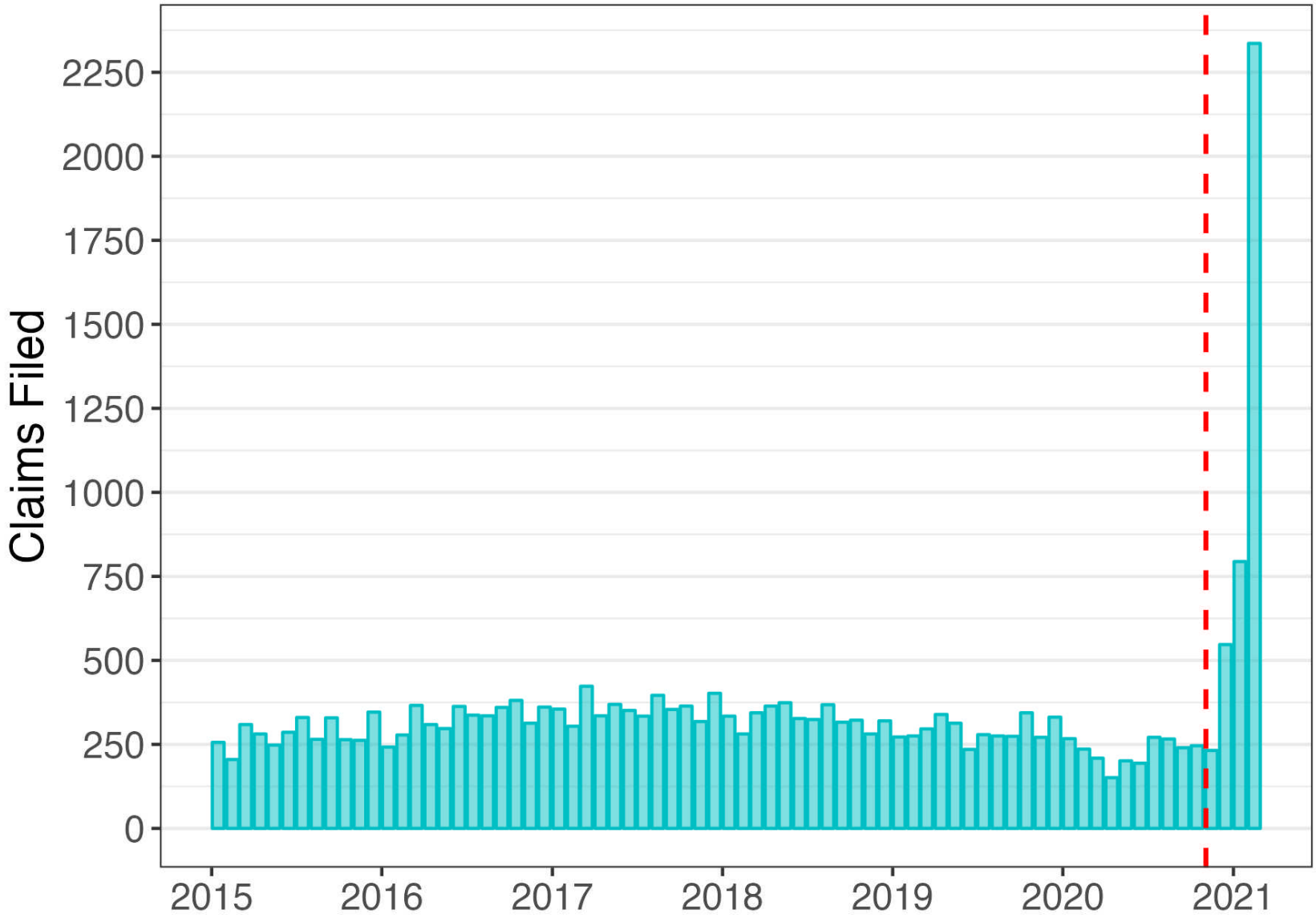
Outline

Number of Transfers in SF County by Property Type



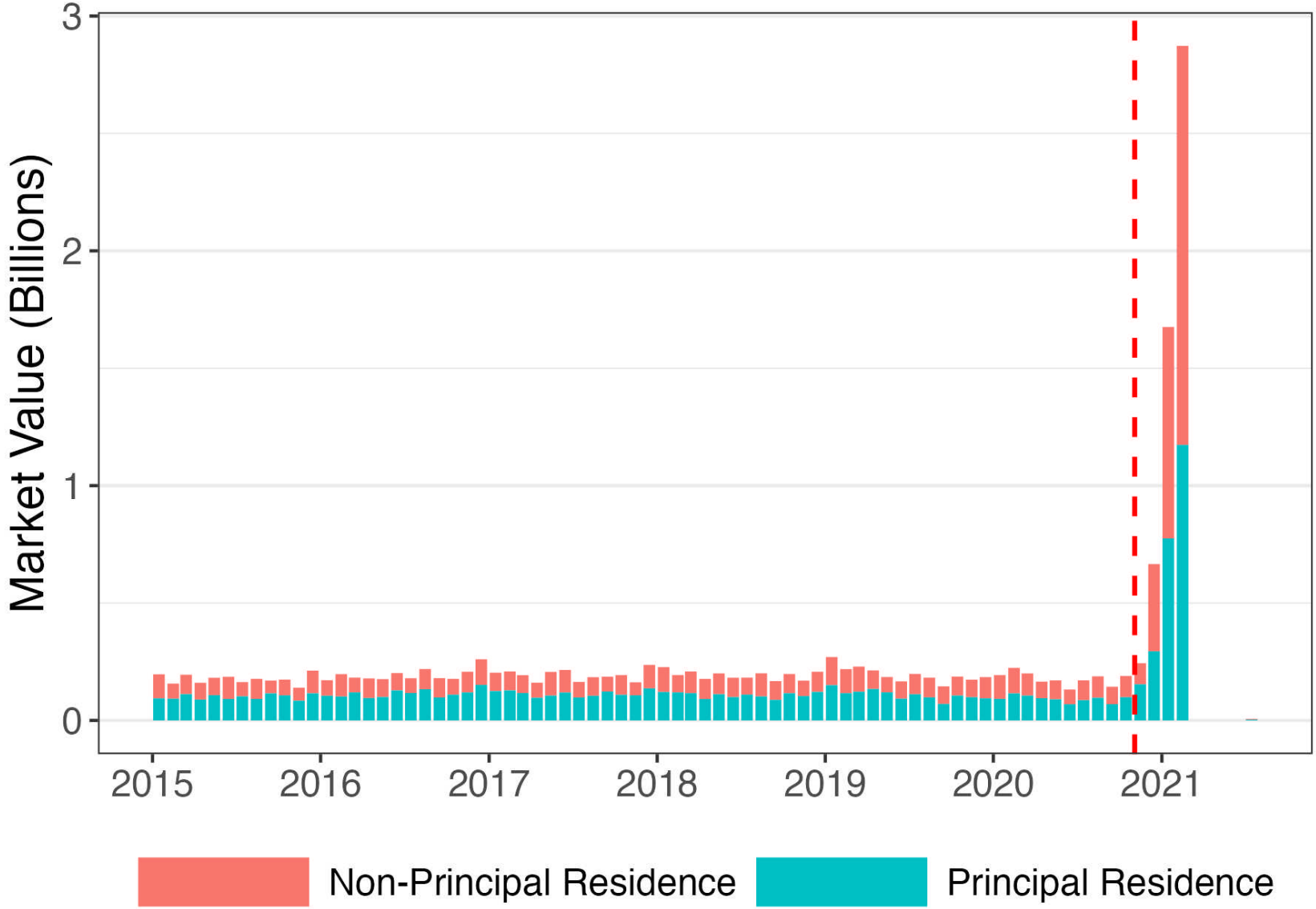
- Equivalent to **18 months** of additional transfers

Number of Transfers in LA County

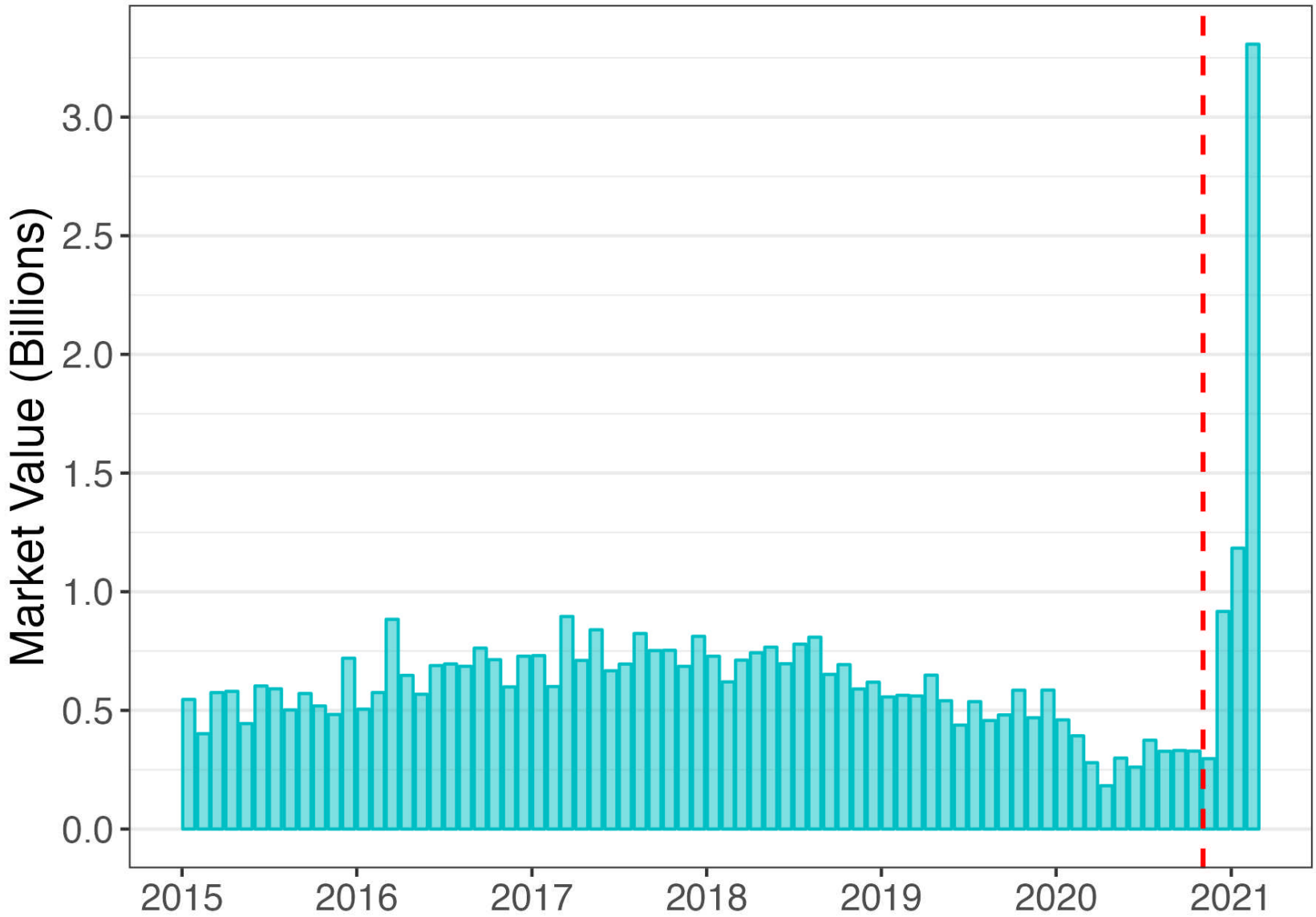


- Equivalent to **13 months** of additional transfers

Total Market Value of Transfers in SF



Total Market Value of Transfers in LA



Elasticity Calculations

Elasticity w.r.t. the raw change in claims:

$$e_{Claims} = \frac{Claims_W - Claims_C}{Claims_C} \times \frac{1}{\log(1-\tau_0) - \log(1-\tau_1)}$$

Elasticity w.r.t. the change in Market Value (MV) of transferred homes:

$$e_{MV} = \frac{MV_W - MV_C}{MV_C} \times \frac{1}{\log(1-\tau_0) - \log(1-\tau_1)}$$

Elasticity w.r.t. "Total Housing Stock":

$$e_{THS} = \frac{Claims_W - Claims_C}{TotalHousingStock} \times \frac{1}{\log(1-\tau_0) - \log(1-\tau_1)}$$

Elasticity Calculations

Table: Elasticity of Transfer Claims to Tax Rate Change

	τ			Claims		Market Value		e		
County	Sample	Control	Window	Control	Window	Control	Window	Claims	Market Value	THS
SF	0.0055	0.0034	0.0034	561	3545	0.90	6.94	614	773	1.78
LA	0.0045	0.0063	0.0046	1100	3892	0.91	5.62	367	744	0.19

- Relative to control window, $e_{MV} > 700$
- Movement of total housing stock is still large in SF $e = 1.8$
  - Smaller in LA
  - Literature estimates: $e \in [0.1, 0.2]$

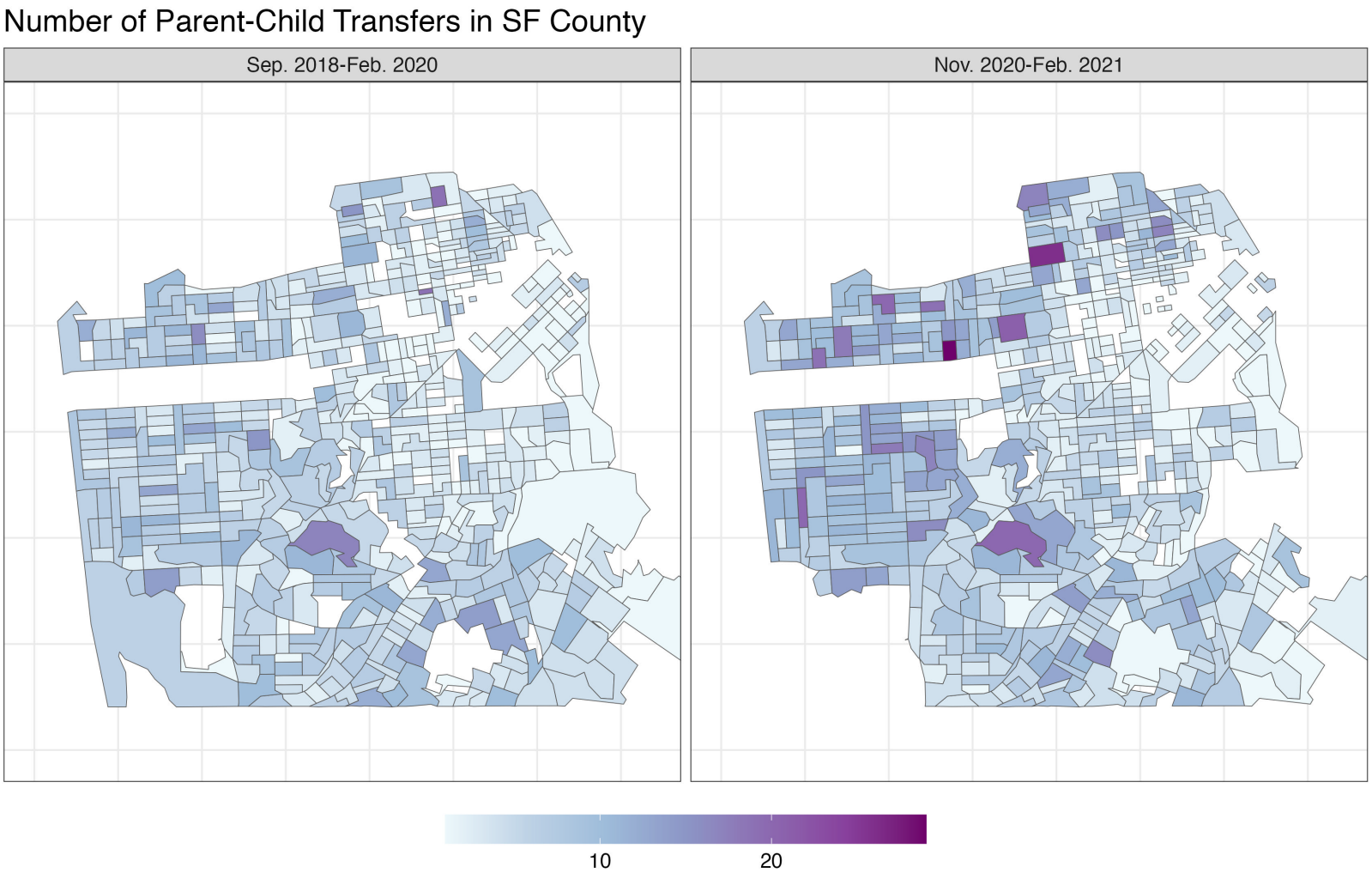
Outline

Did SF and LA Respond Differently?

- Is home turnover higher in LA than SF?
  - If yes, we'd expect fewer transfers in LA county because homes were purchased more recently, lowering the benefits of transfer
  - But this does not seem to be the case
    - Average home base year is 5 years lower in LA than SF
    - More residential building permits and active listings in LA in absolute terms, but SF has similar or higher rates as a percentage of housing stock Plots

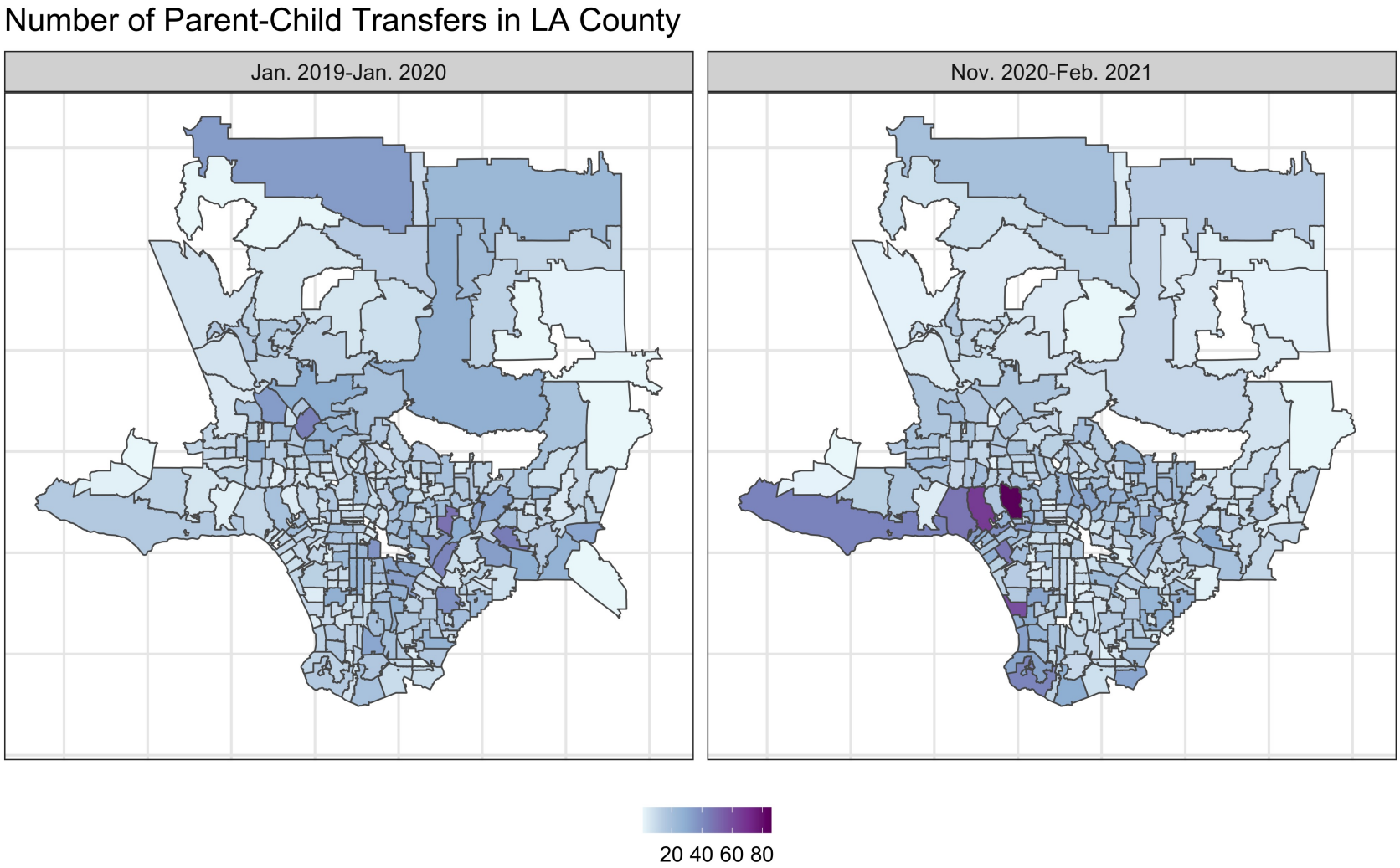
- Are those who rush to transfer different in some way?
  - Tend to be **wealthier**, whiter
  - LA responses are $\geq$ SF responses **in wealthiest Census tracts**

Geographic Concentration in Window in SF



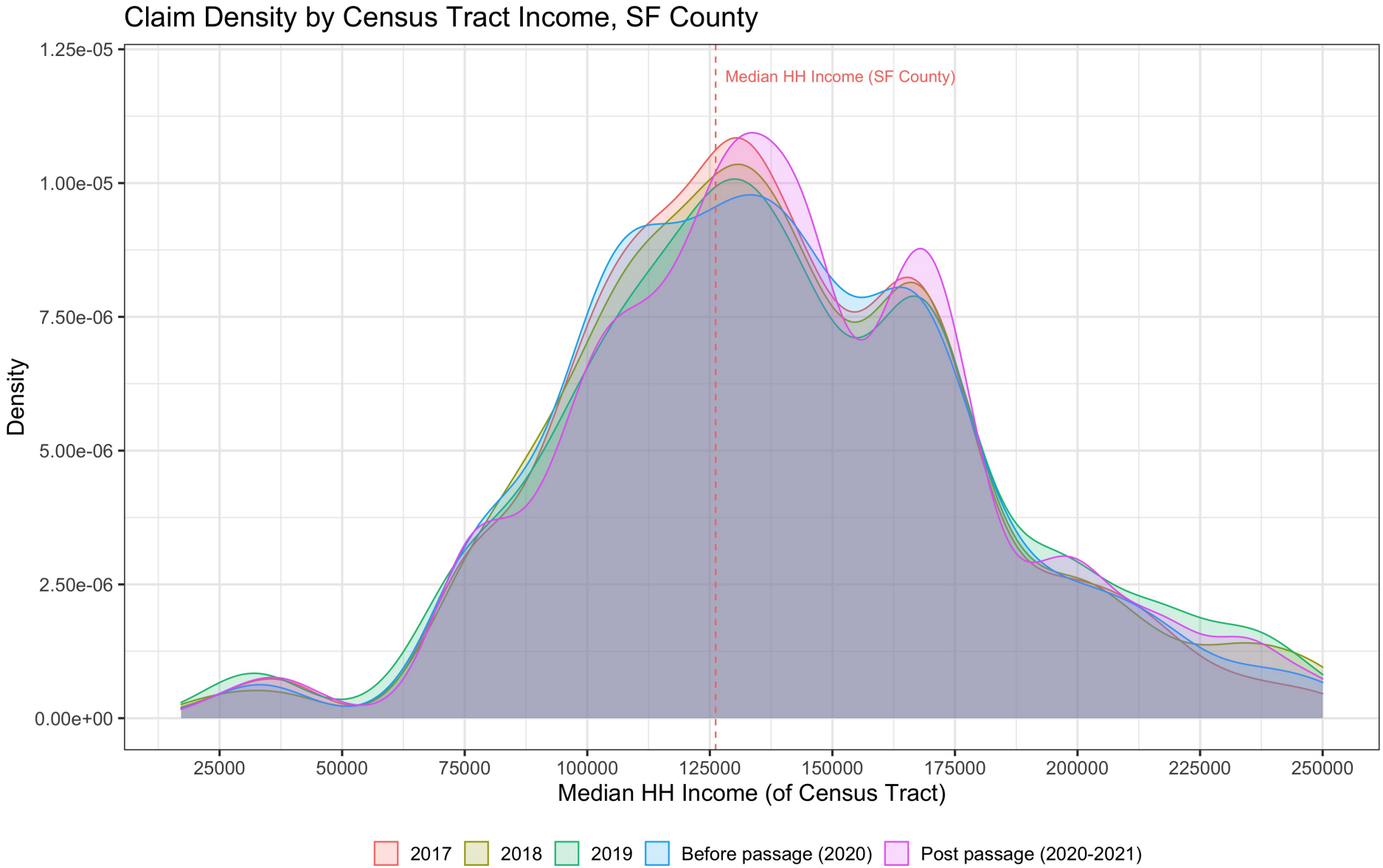
- (Slightly?) Richer tracts in 2020: Presidio, Marina, Sunset, Richmond

Geographic Concentration in Window in LA

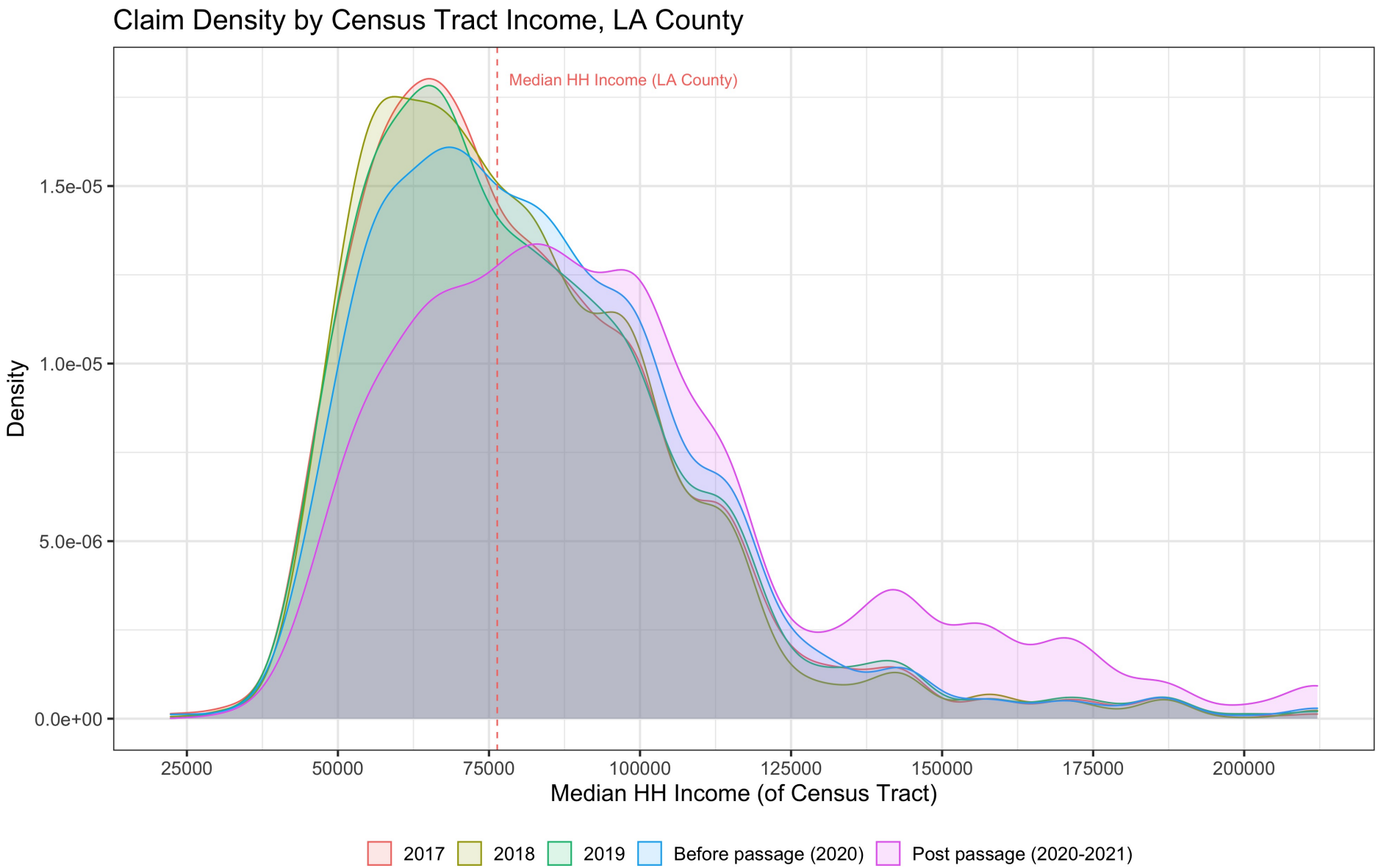


- Richer tracts in 2020: Malibu, Pacific Palisades, Beverly Hills, Redondo Beach

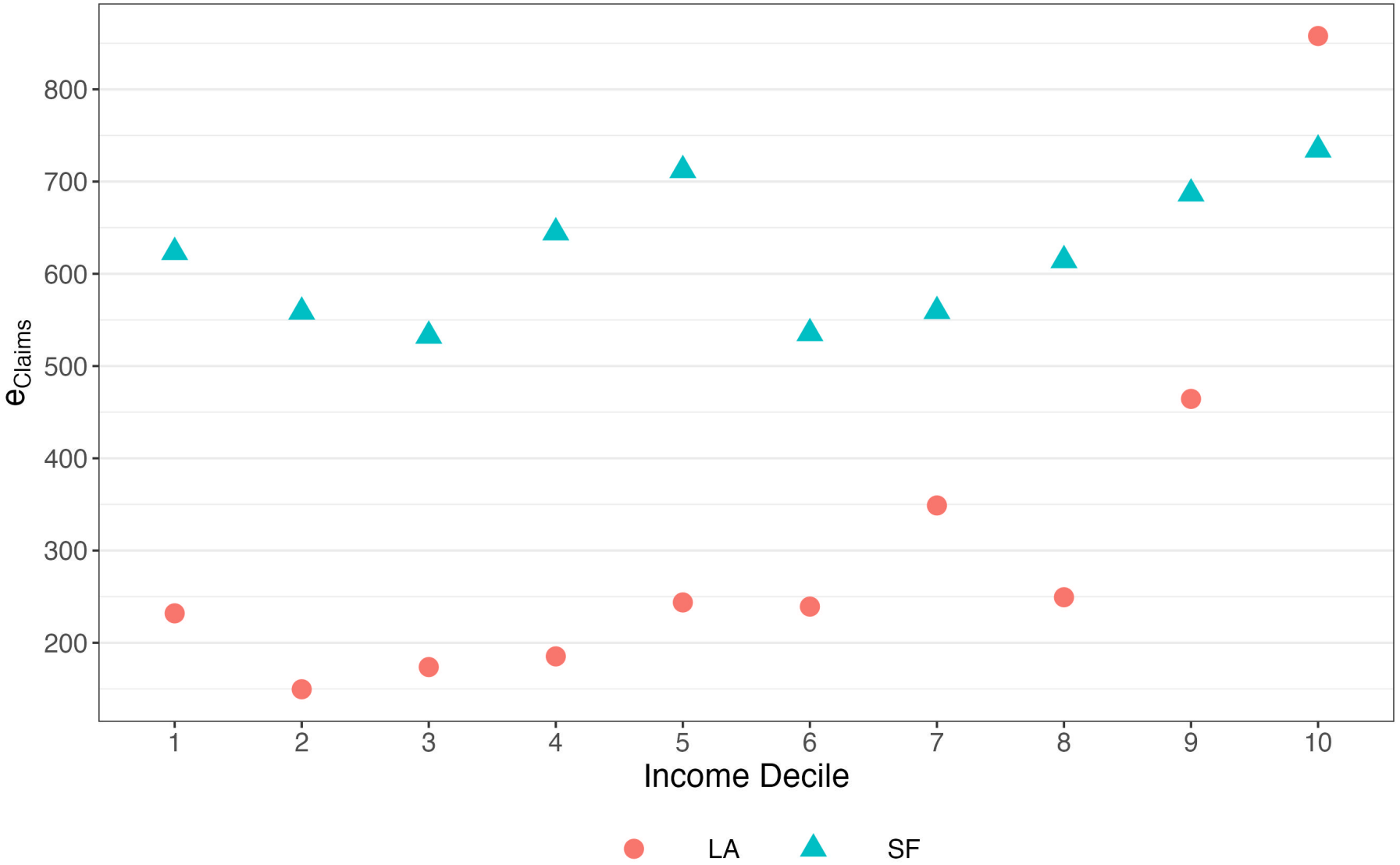
Concentration of Wealthy in Window in SF



Concentration of Wealthy in Window in LA

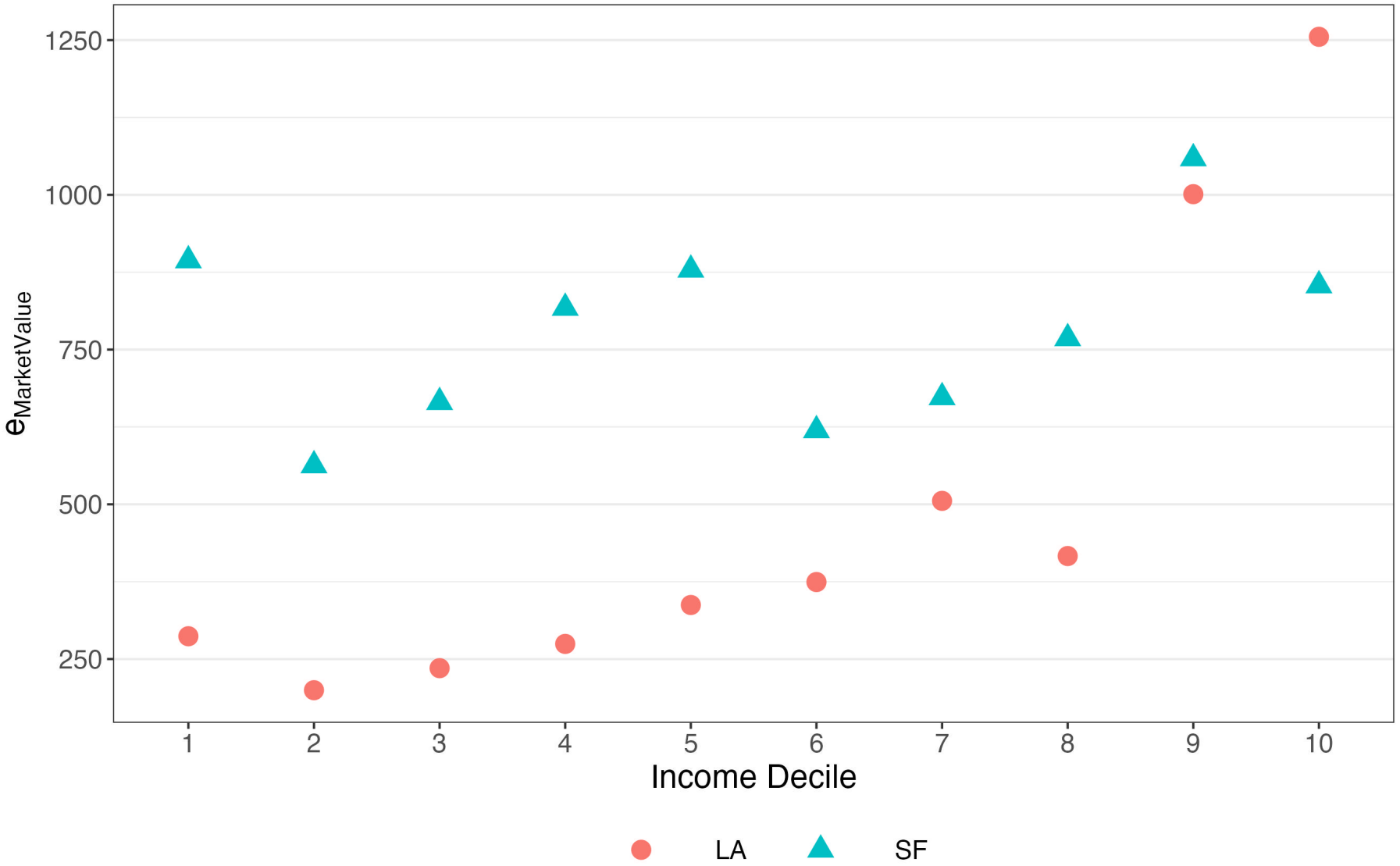


Elasticity of Claims by (Census Tract) Income



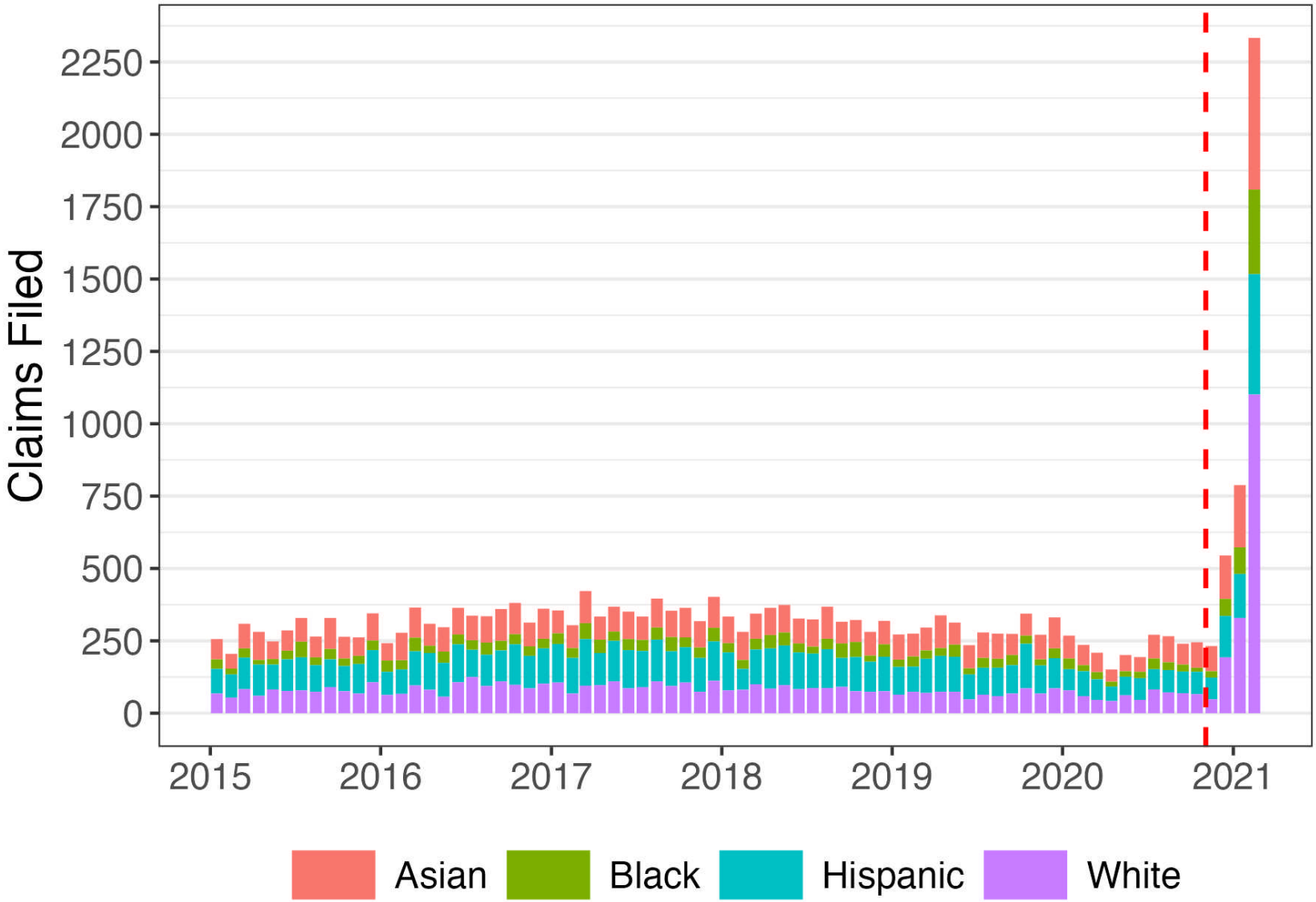
- Elasticity highest in highest income deciles

Elasticity of Market Value by (Census Tract) Income



- Elasticity highest in highest income deciles

Number of Transfers in LA County by Predicted Race



- White share increases in window, Hispanic share declines

Benchmark to the Literature

- Kopczuk (2013) (Handbook of Public Economics): most papers estimate an elasticity of estate size at death to $1 - \tau$ of 0.1-0.2
- Goupille-Lebret and Infante (2018) (JPubE): Change in preferential inheritance tax treatment (+ notched schedule by age) for retirement accounts yields an elasticity of wealth accumulation of 0.23-0.36
- Glogowsky (2021) (JPubE): Kinked inheritance tax schedule in Germany yields an elasticity of taxable wealth transfers of < 0.1
- Locks (2023) (JMP): response to inheritance tax hike in Brazil yields a short-run elasticity of 20, due to re-timing of wealth transfers
  - Comparable elasticity in this project: $\sim$700

Outline

Framework

We assume parents and children overlap for two periods. The parent can give γ in gifts (property) in period 1 or period 2, s.t.

$$\text{Giving now: } U = u(W - S) + u(S) + \alpha[u(w_1 + (1 - \tau_1)\gamma) + u(w_2 + (1 - \tau_1)\gamma)]$$

$$\text{Giving later: } U = u(W - S + \gamma) + u(S) + \alpha[u(w_1) + u(w_2 + (1 - \tau_2)\gamma)]$$

where

- W is the parent's initial wealth;
- S are the parent's savings;
- w_1 and w_2 are the children's wages in period 1 and 2;
- γ is the property gift;
- τ_j is the tax on the gift at period j.

Framework

Let $g_1 = (1 - \tau_1)\gamma$ and $g_2 = (1 - \tau_2)\gamma$.

A parent would choose to give in Period 1 over Period 2 if

$$u(W - S) - u(W - S + \gamma) + \alpha[u(w_1 + g_1) + u(w_2 + g_1) - u(w_1) - u(w_2 + g_2)] > 0$$

i.e. the increase of the child's utility, weighted by α, must outweigh the increase in utility from consuming the property in period 1.

- If the tax on gifts increases in the next period, then τ_2 will increase and g_2 will fall, further pushing the acceleration of the gift.
- Will depend on the initial wealth.

Framework

How might this affect optimal policy and gift taxation?

How does this interact with bequest taxation when transfers occur after death?

Can our elasticity estimates be used in a framework to understand how the above questions affect welfare?

Outline

Conclusion

- Large behavioral response to closing of property tax inheritance loophole in SF and LA
  - $e > 700$, very large compared to literature
- Delayed revenue gains by 18 months in SF, 13 months in LA
- Behavioral response was concentrated in wealthier Census tracts
- How does this affect optimal inheritance taxation? (In Progress)

Thank you!

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Appendix: LA Transfers with (ZIP Code) Income

Table: Income by Time of Transfer, 2019-2021

Group	Race	Base Year	Median HH Inc	Mean HH Inc
Transferred in Window	Asian	1998	91692	128785
Transferred not in Window	Asian	2005	82494	109769
Transferred in Window	Black	1989	91228	129977
Transferred not in Window	Black	1995	77623	103321
Transferred in Window	Hispanic	1995	77618	103914
Transferred not in Window	Hispanic	1999	65523	83636
Transferred in Window	White	1989	102906	150212
Transferred not in Window	White	1997	88370	120900

- $20-40,000 difference

Back

Appendix: Active Listings and Permits (Total)

Appendix: Active Listings and Permits (Percent Housing Stock)