

The Impact of State Taxes on the Location of High Income Taxpayers

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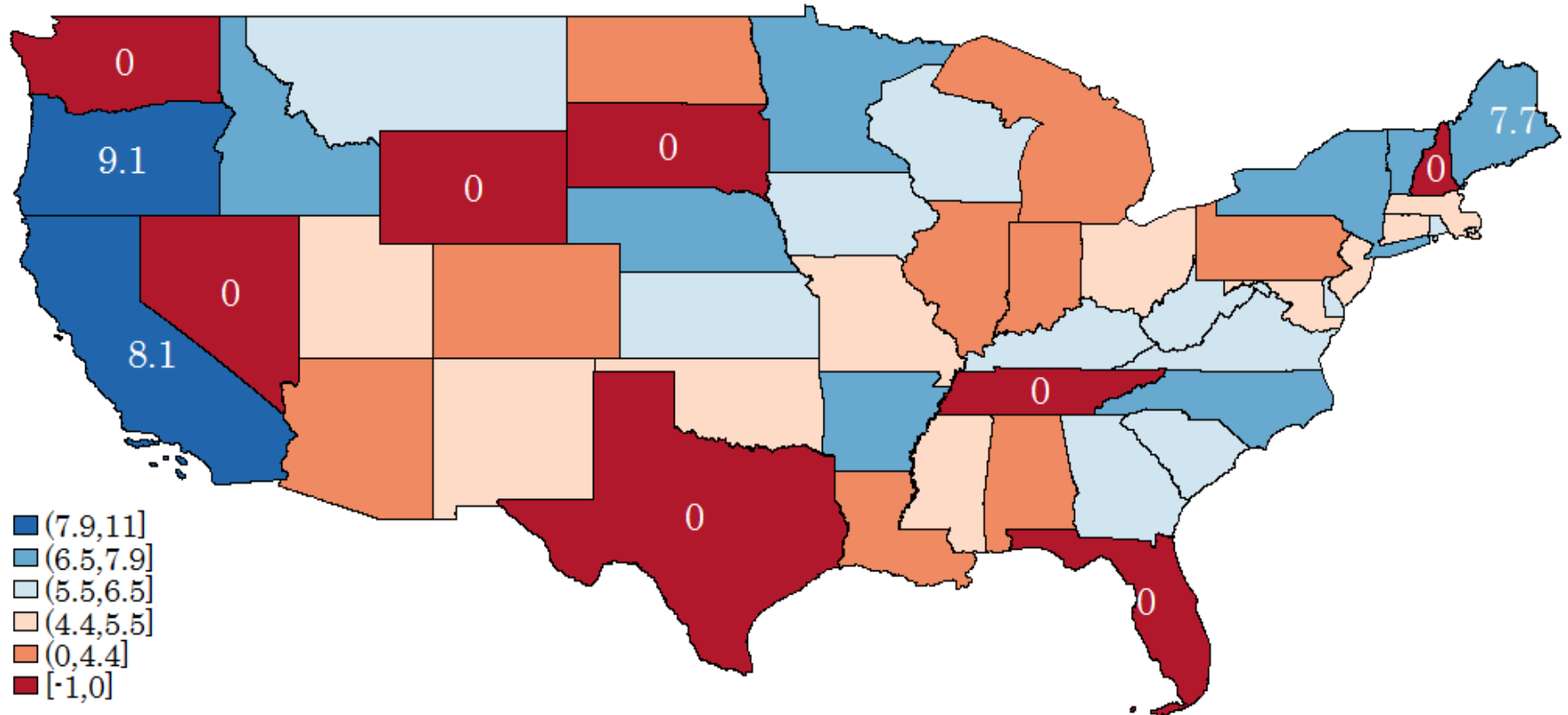
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State Tax Rates for High-Earners Vary A Lot...

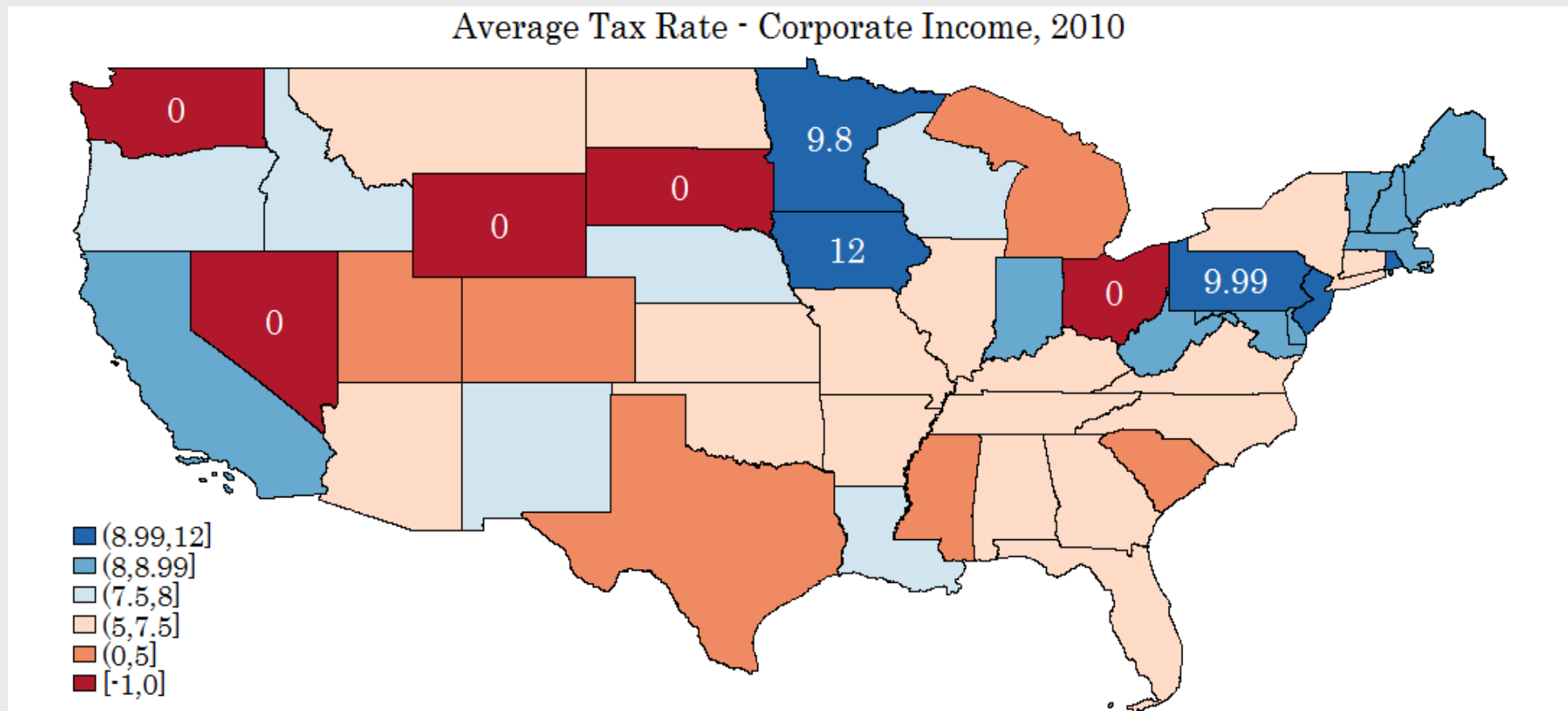
Individual income Average Tax Rate for household making \$365,026 (99th %tile)

State Average Tax Rate at 99th Income Percentile - 2010



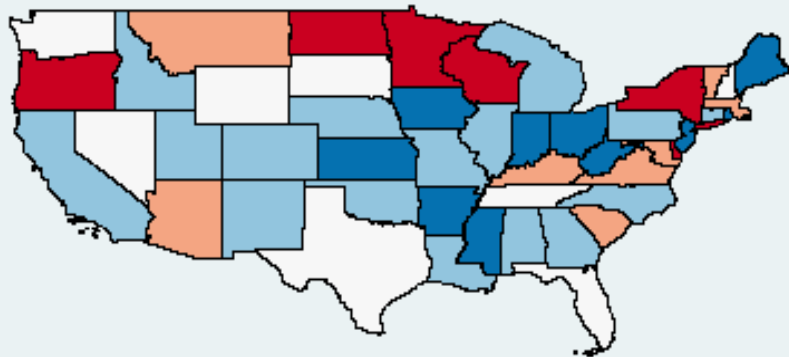
...And So Do State Corporate Tax Rates

Corporate income Average Tax Rate

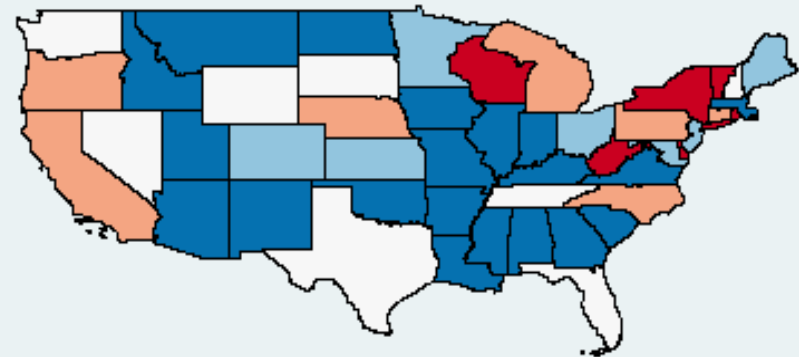


Change in Individual Income Average State Tax Rate at 99th Income Percentile

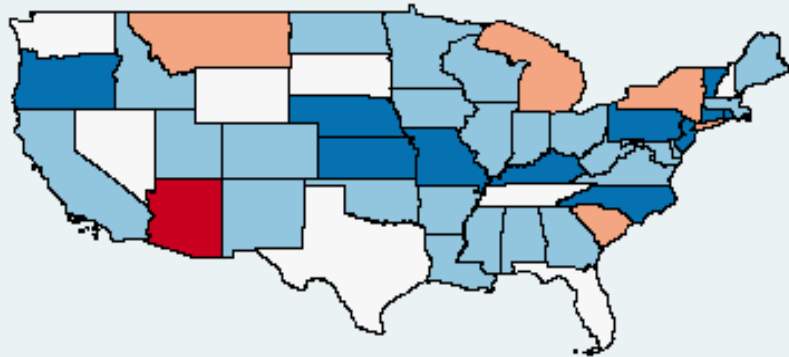
1977-1985



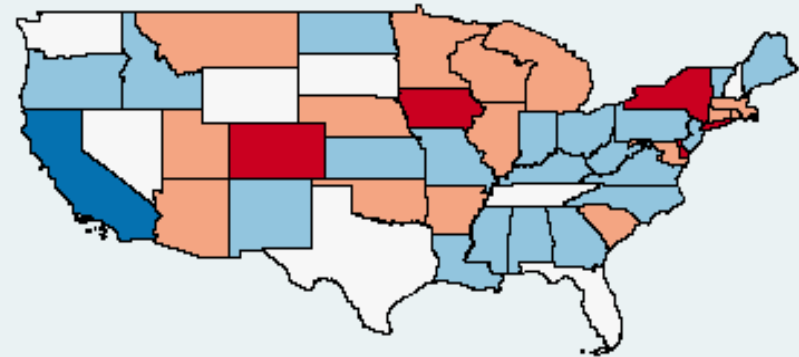
1985-1990



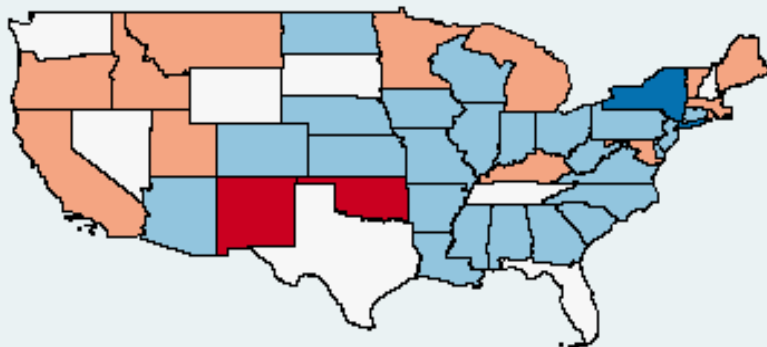
1990-1995



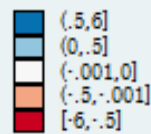
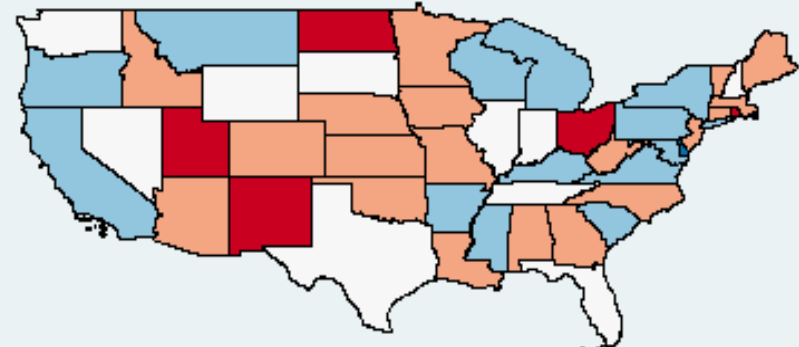
1995-2000



2000-2005

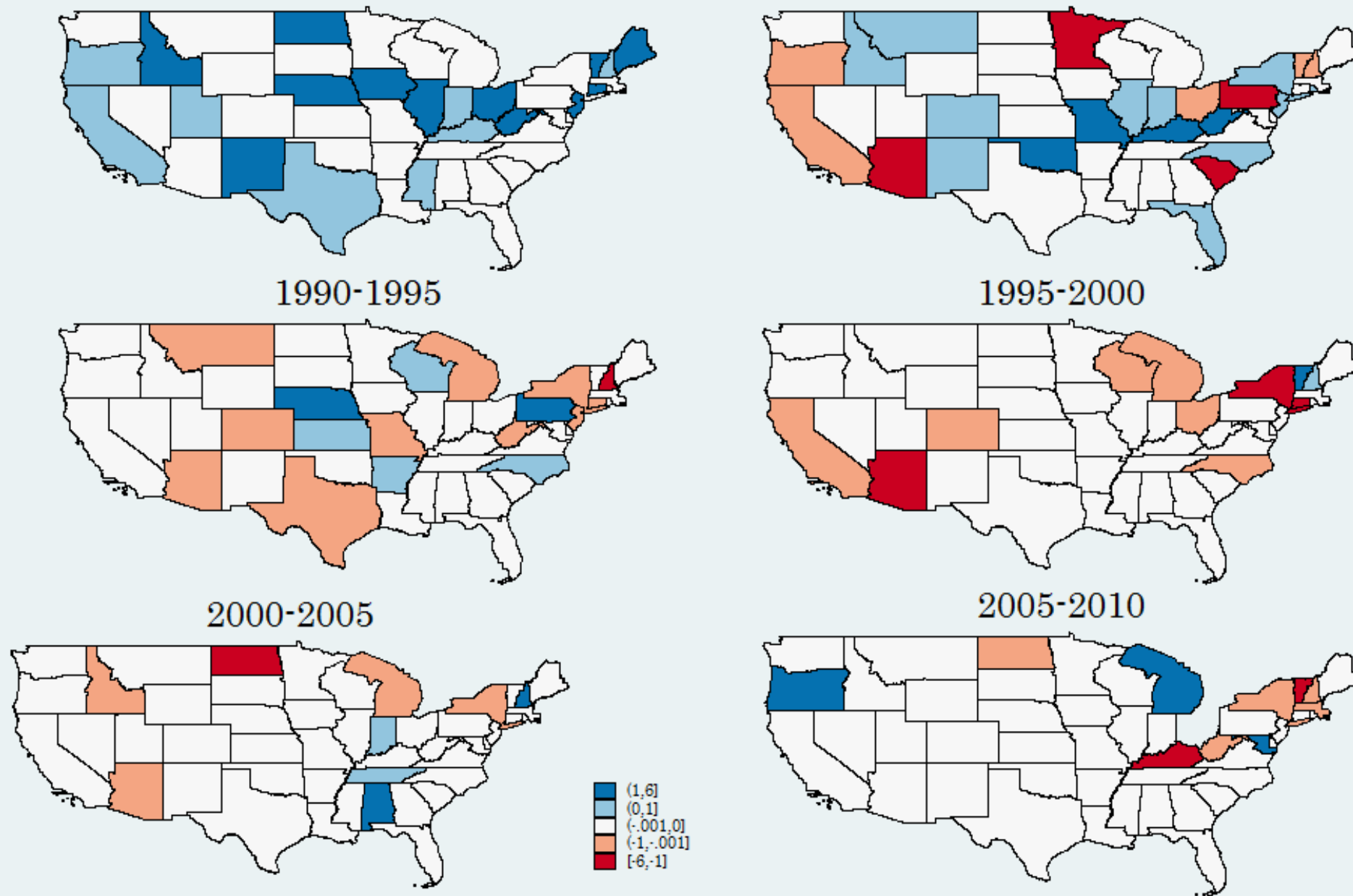


2005-2010



Notes: Categories are identical across maps. White indicates no change.

Change in Corporate Income Marginal Tax Rate



Notes: Categories are identical across maps. White indicates no change.

States use tax policy (in part) to compete for skilled workers and businesses

- For example, Texas ran ads in California, Illinois and New York urging businesses to move to Texas for its low taxes

Get Out While There's Still Time

AN OPEN LETTER FROM
TEXAS GOVERNOR RICK PERRY



If you're a business owner in Illinois, I want to express my admiration for your ability to survive in an environment that, intentionally or not, is designed for you to fail. With rising taxes and government interference on the upswing, your situation is not unlike a burning building on the verge of collapse.

If you're thinking of "just riding it out" you might want to reconsider. There is an escape route to economic



Do High Taxes *Push Out* Top Earners? Do Low Taxes *Pull In* Top Earners?

What do recent research studies have to say?

Moretti & Wilson

(2017 *American Economic Review*)

- Estimate tax-induced migration of high-income workers
- Focus on **star scientists** (prolific patenters)
- Use patent data to measure state-to-state migration of all star scientists in U.S. from 1976 to 2010
- Relate migration to state individual and business tax rates
- Identify tax effects using variation **over time** within **origin-destination state pairs**
 - Looking at what happens to the migration flows of star scientists for that origin-destination pair after their tax differential changes
 - Using changes over time within state pairs controls for potential correlation between state tax rates and permanent characteristics of states (like weather, amenities, regulations, business culture, etc.)

Data

1. Universe of U.S. patents from 1976-2010

- Identify “star” patenters: top 5% in 10-year patent count (or citations).
- Identify state of residence this year and next year.
- Calculate *yearly migration flow* between each origin→destination state dyad.

2. Individual Income Tax Rates by Income Level, by State

- NBER *TaxSim* (average tax rate)

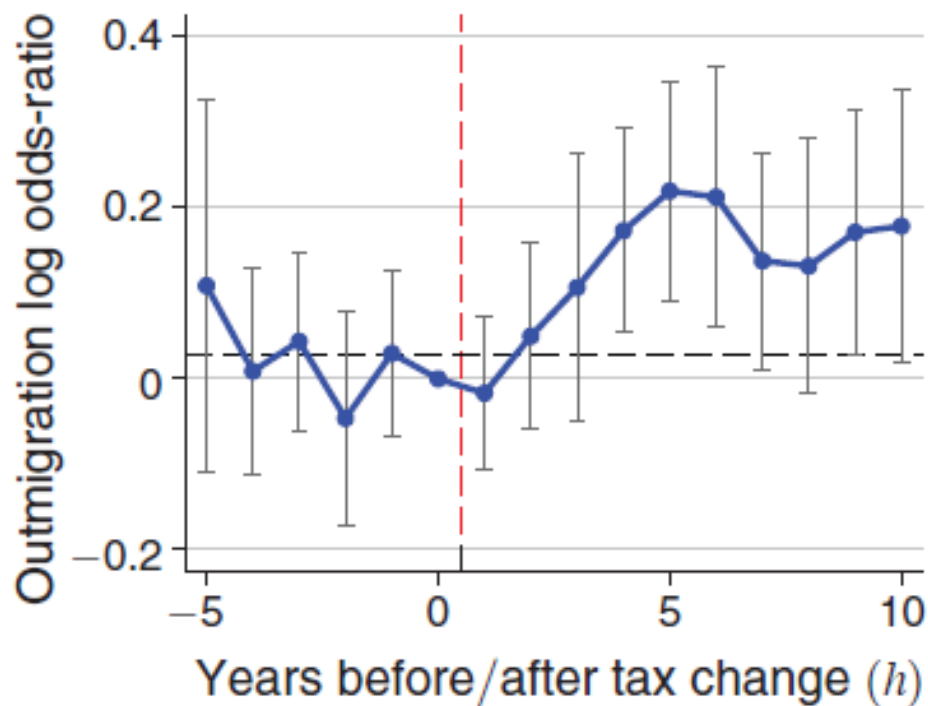
3. Corporate Income Tax Rates, R&D Credit Rates, and Investment Credit Rates, by State

- Chirinko & Wilson (2008), Wilson (2009), Moretti & Wilson (2014)

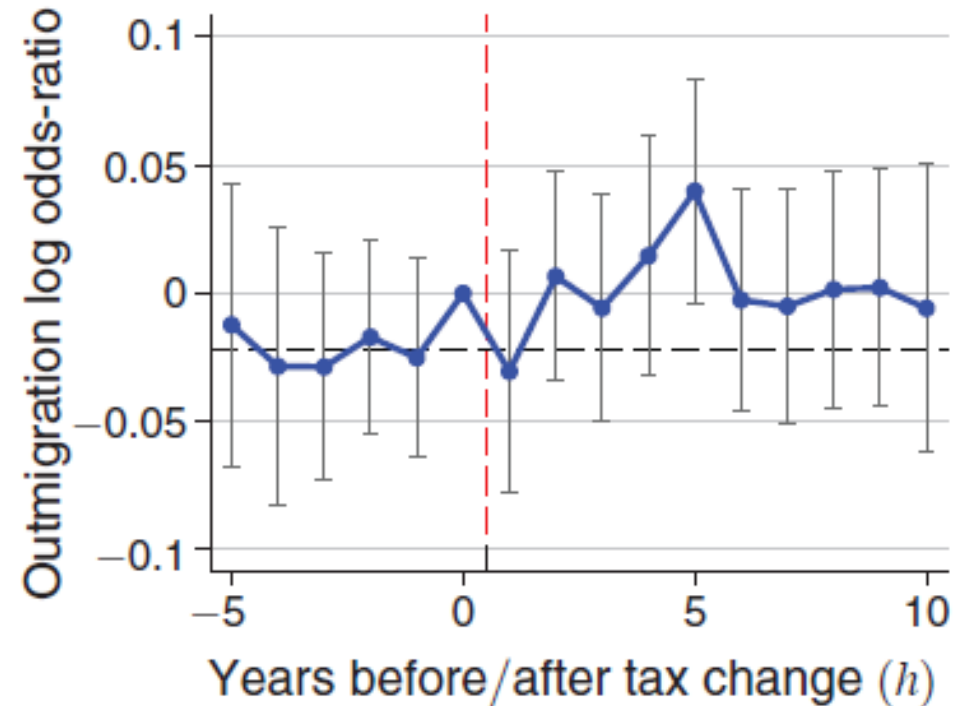
Graphical Evidence – Event Study

Outmigration Before and After Tax Change Event

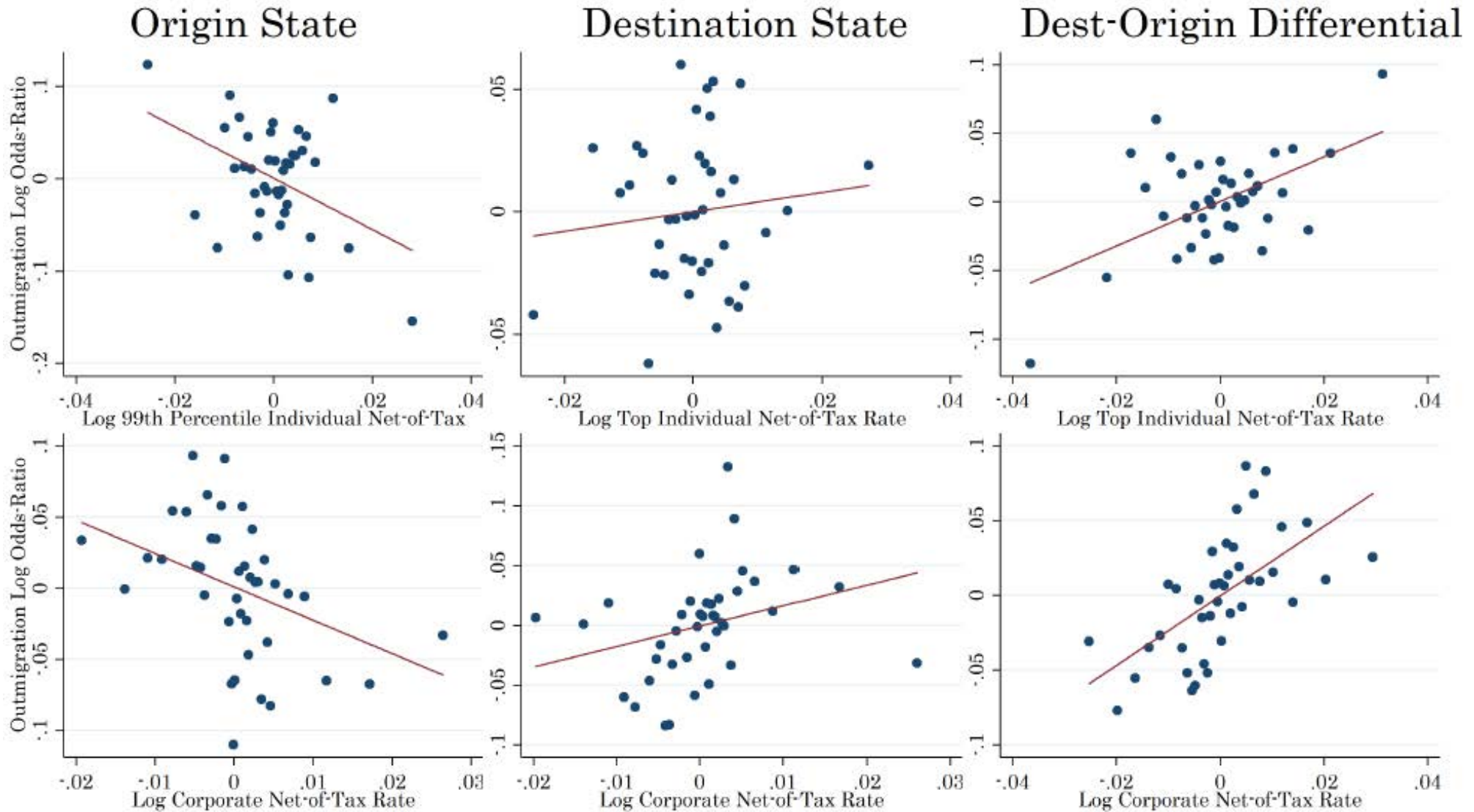
Panel A. Top individual ATR



Panel B. Corporate tax rate



Graphical Evidence – Outmigration vs. Net-of-Tax Rates



Bin scatterplots, conditioned on state-pair and year fixed effects

Summary of Moretti & Wilson (2017) Findings

- **Taxes (& Credits) Matter**
 - **Both Personal Taxes and Business Taxes**
- **Migration Response bigger for persistent changes and grows over time**
- **Push vs Pull**
 - **For taxes, push (origin tax) effect is bigger than pull (destination tax) effect**
 - **For credits, pull effect is bigger**
- **Corporate Taxes Matter**
 - **only matter for labor demand of *Corporations***
 - **only matter for labor demand in states where labor (payroll) is part of income apportionment formula**

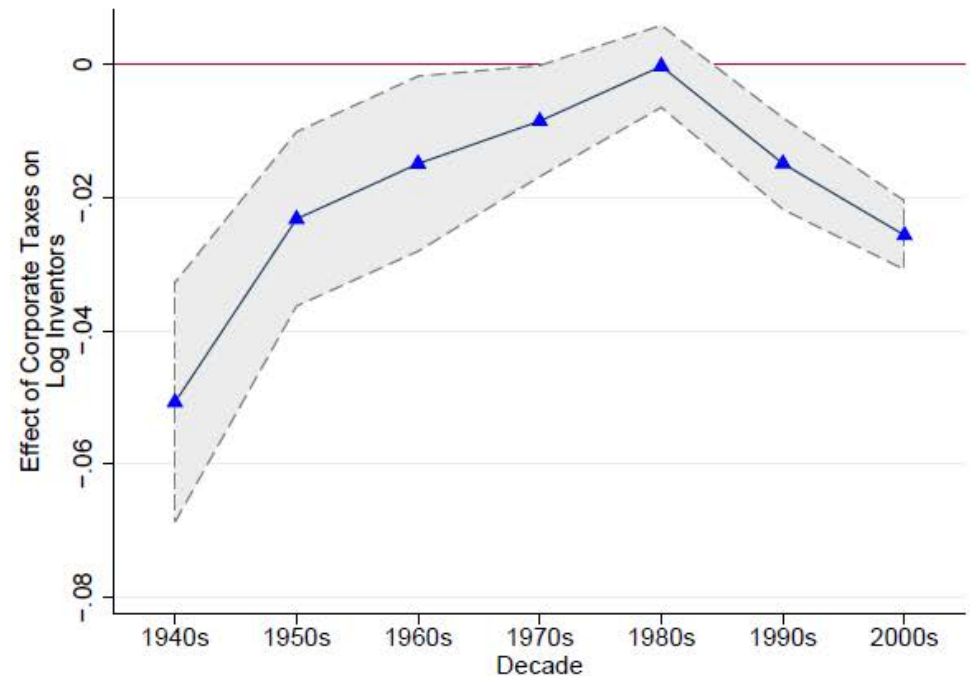
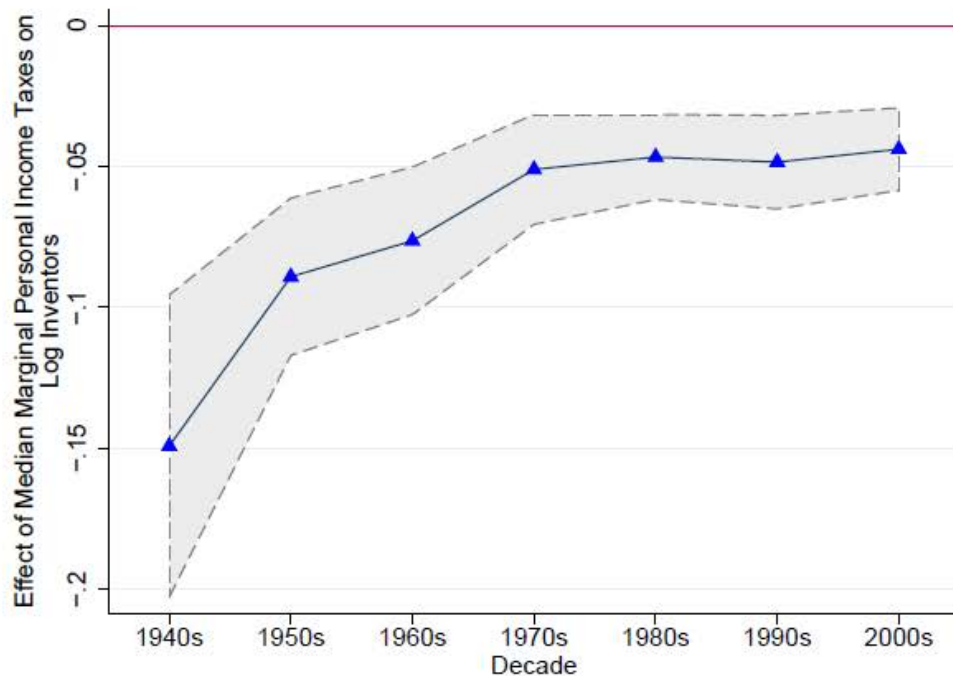
How big are the effects?

- **Baseline results imply tax elasticity of probability of moving of about 1.8**
- **How big is 1.8 ? Back-of-the-envelope illustration:**
 - **New York cut 99th percentile ATR from 7.5 to 6.85% (0.65 p.p.) in 2006**
 - **Elasticity of 1.8 implies long-run response of 14 fewer stars leaving NY and 14 more stars moving into NY.**
 - **Implies long-run addition of 28 stars to NY, on base of 1,118 stars – an increase of 2.5%.**

Other Analyses

Akcigit, Grigsby, Nicholas, and Stantcheva (2018)

- Using longer historical sample, they also find high personal and corporate tax rates reduce the stock of inventors in a state



Other Analyses

Agrawal & Formeny (2018)

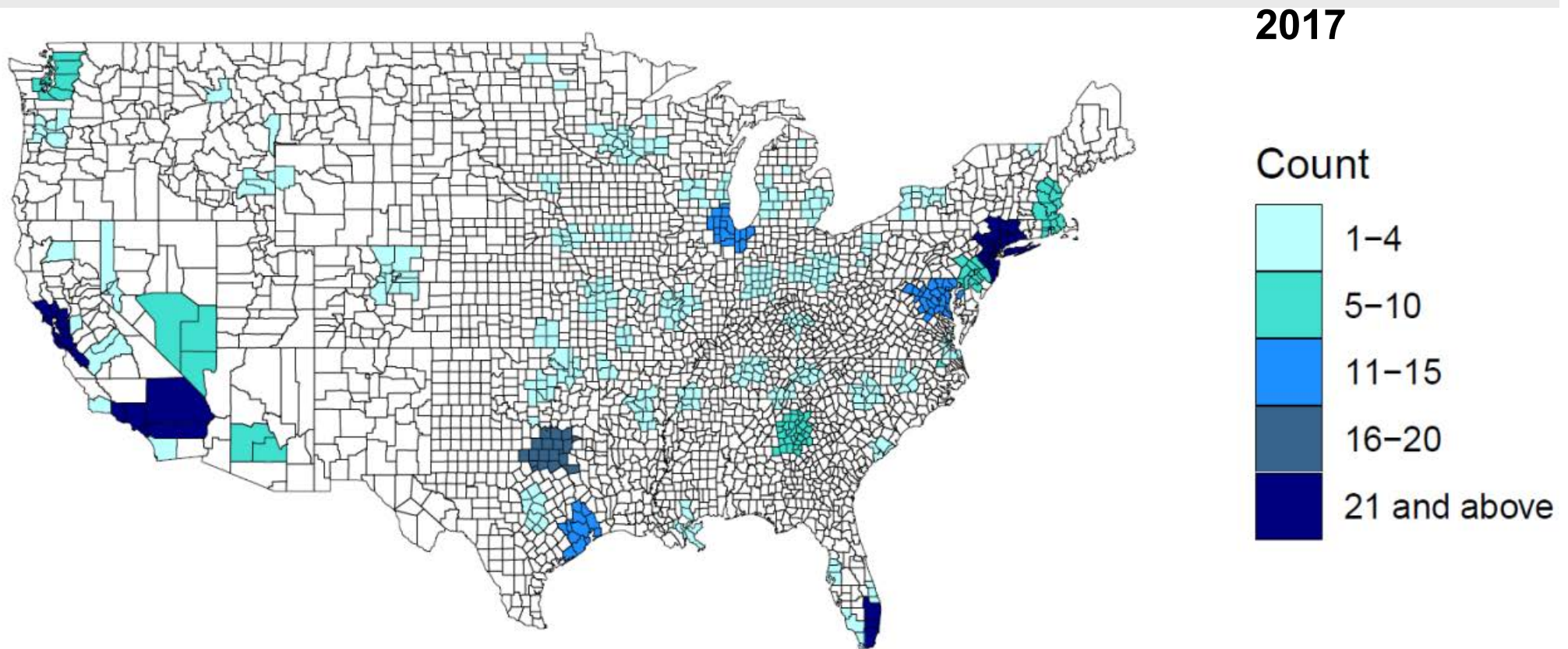
- Using administrative records data in **Spain**, they find regional “taxes have a significant effect on location choice” (conditional on moving)
- But also find “increase in tax revenue due to higher tax rates is larger than the loss in tax revenue from the out-flow of migration.”
- I.e., high tax push out top earners, but revenue gain may be worth the cost.

Other Analyses

- A series of recent papers used administrative data to assess whether state-level tax hikes cause out-migration of **millionaires**
 - Young, Varner, Lurie, and Prisinzano (2016, *American Sociological Review*)
 - Young and Varner (2011, *National Tax Journal*) – New Jersey case study
 - Varner, Young, and Prohofsky (2018, working paper) – California case study
- Find small effects.
- Authors argue most millionaires are tied to their state due to business, property, and personal commitments
- How might we reconcile this with other research showing big tax effects for **star scientists** (and athletes and high-earners in Spain) ?

New Preliminary Work by Moretti & Wilson

- Look at **Forbes 400 Richest Americans**, each year from 1982 to 2017
- Where do they live?



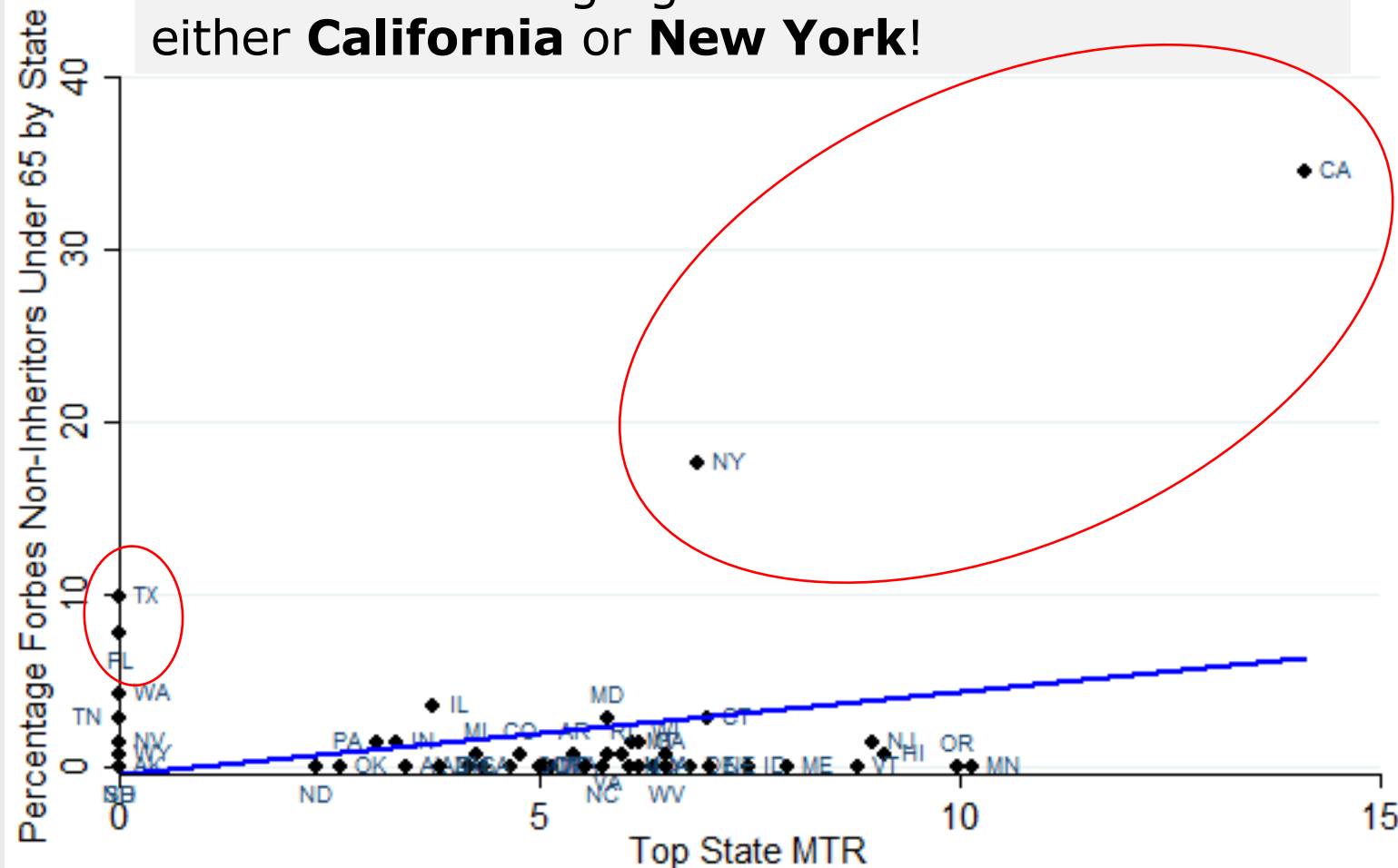
Forbes 400 Richest Americans

- Is their location choice affected by state taxes?
- Can we differentiate between those “tied” to their business locations and those more “footloose”?
 - Compare **Inheritors** (more likely to be geographically mobile, footloose) to **Non-Inheritors** (more likely to be working and tied to business location)
 - Can even drill down to **Non-Inheritors in prime working years** – most likely to be tied to business location

Evidence from FORBES 400 Richest Americans

Non-Inheritors, Under 65

Half of all working-age non-inheritors live in either **California** or **New York!**

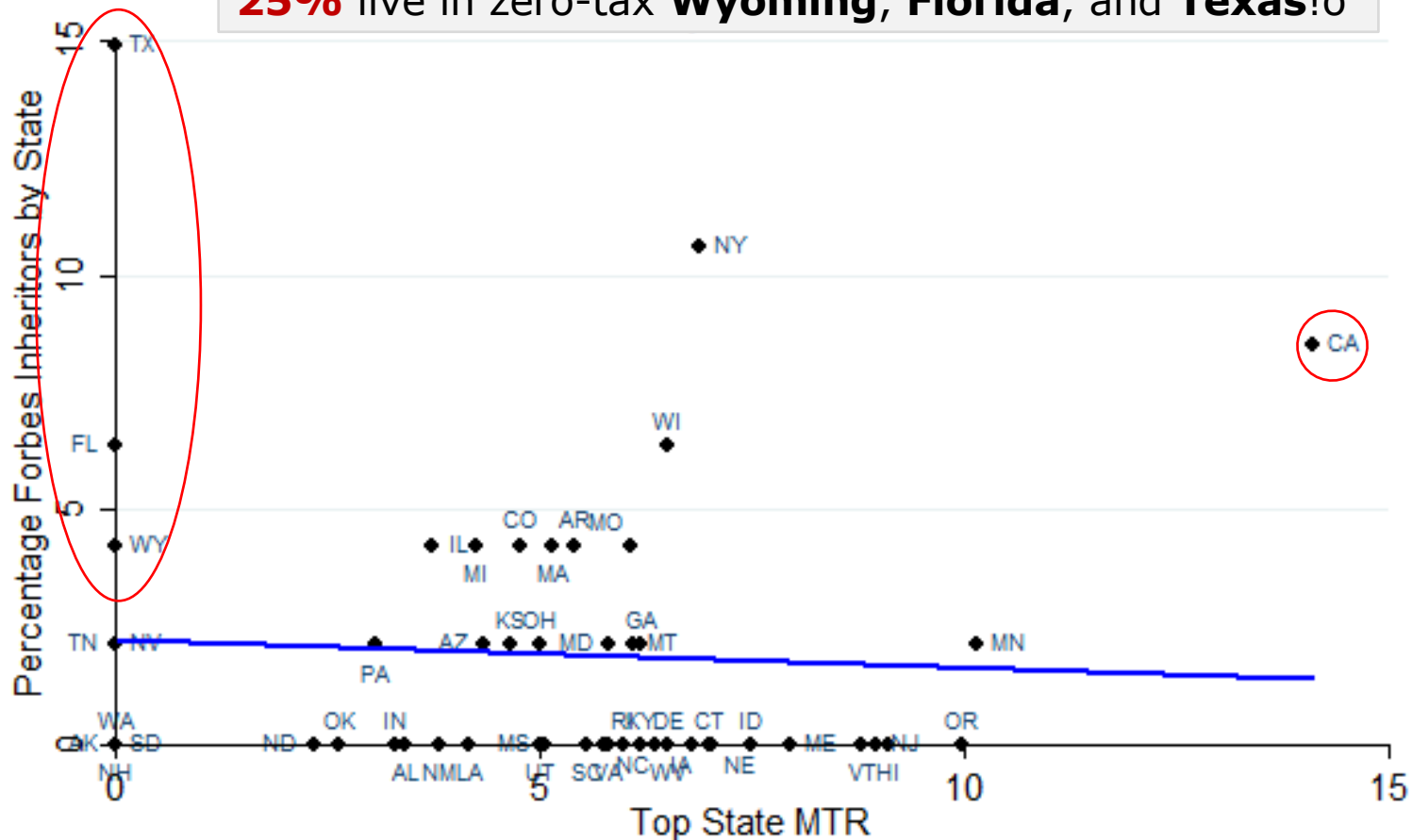


- Young, Rich, **Non-inheritors** tend to live in **high tax states** like NY and CA
 - states with advantages in amenities and agglomeration economies

Evidence from FORBES 400 Richest Americans

Inheritors

Less than 20% of inheritors live in **CA** or **NY**, while **25%** live in zero-tax **Wyoming, Florida, and Texas!**



- Correlation turns **negative** when looking at **Inheritors**
- Suggests that for this footloose group, high taxes counteract pull of places like NY and CA.

Conclusion

- Taxes DO affect where high-income earners choose to live
 - **Both Personal Taxes and Business Taxes**
- But some types of high-income earners are more mobile than others.
 - **Corporate scientists:** very mobile and very sensitive to taxes
 - **Non-profit scientists:** less mobile and less sensitive to taxes
 - **Ultra-rich:**
 - **Inheritors** very mobile and appear to be sensitive to taxes
 - while young, **non-inheritors** appear more tied to their locations