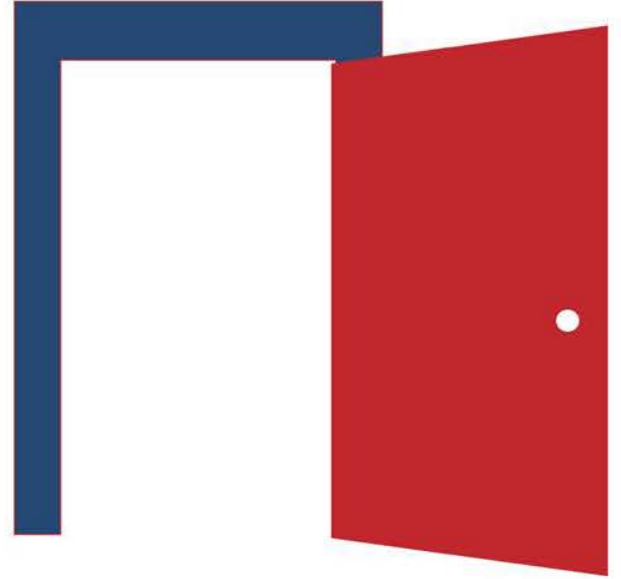


**The Effects of  
Occupational Licensure  
on Competition, Consumers,  
and the Workforce:  
Empirical Research & Results**



*A Roundtable Organized by the FTC's Economic Liberty Task Force*  
November 7, 2017 | #EconLibertyFTC

# Welcome



# **The Effects of Occupational Licensure on Competition, Consumers, and the Workforce: Empirical Research and Results**

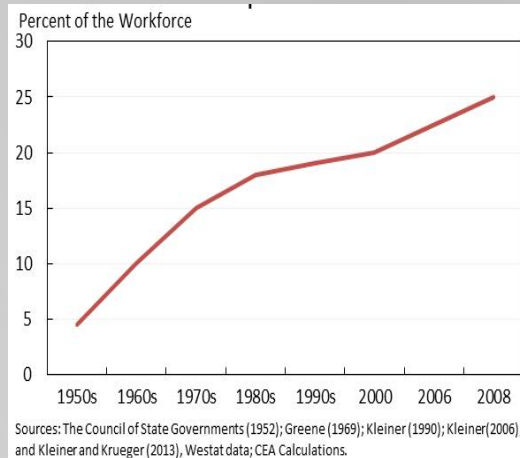


Federal Trade Commission,  
Washington, D.C.  
November 7, 2017

***Licensing Occupations: An Overview***

*Morris M. Kleiner, University of Minnesota, Twin-Cities*

# How Prevalent Is Occupational Licensing?\*



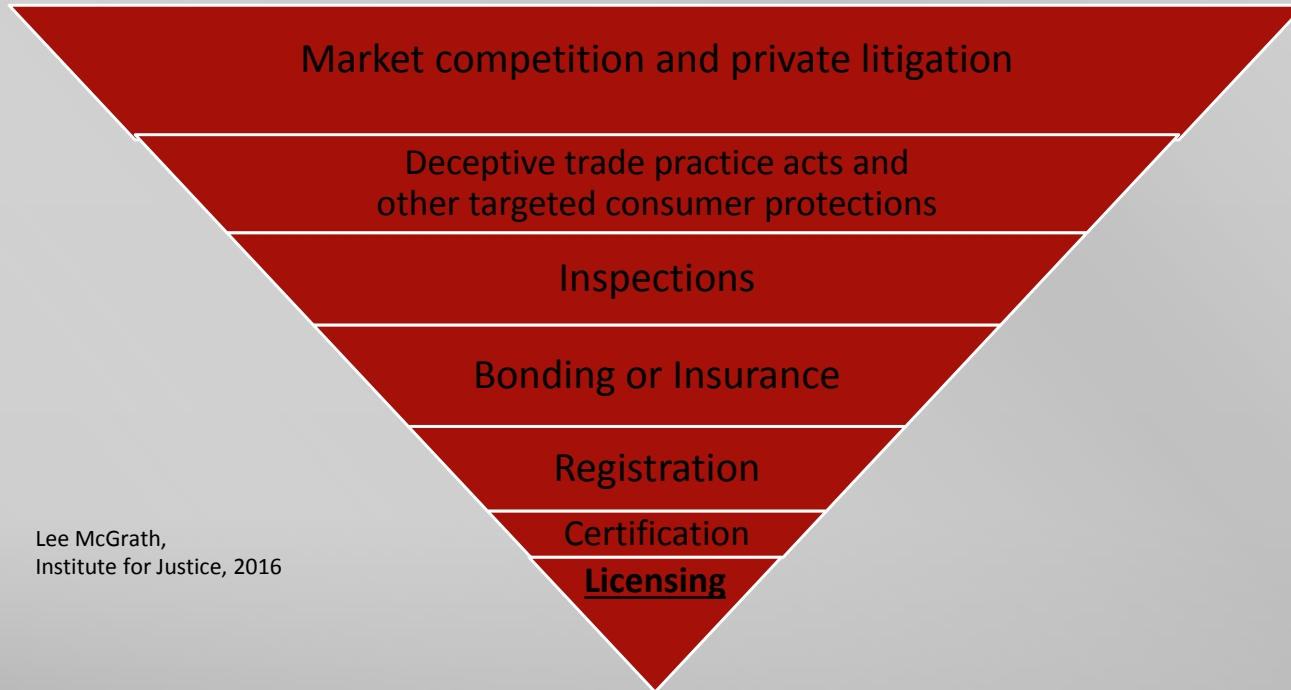
- In 2015, approximately 25% of workers required a license from the government.
- In 2003, more than 800 occupations were licensed in at least one state.

\*Wozniak et. al. White House Report, 2015

## *Extent of the Issue*

- Over 800 occupations are licensed by at least one state
- Over 1,100 registered, certified, or licensed in at least one state
- 65 occupations licensed in all states

# Use of least restrictive form of regulation consistent with policy goals



Lee McGrath,  
Institute for Justice, 2016

## Former Supreme Court Justice Samuel Jackson

- “The modern state owes and attempts to perform a duty to protect the public from those who seek for one purpose or another to obtain money. When one does so through the practice of a calling, **the state may have an interest in shielding the public against the untrustworthy, the incompetent, or the irresponsible.**”

## Market Economist Perspective

- “ The puzzle is not why we have so many silly licensure laws, but why we don’t have far more.”
- **On the other side, the great argument for the market is its tolerance of *diversity*; its ability to utilize a wide range of special knowledge and capacity. It renders special groups impotent to prevent experimentation and *permits the customers and not the producers to decide what will serve the customers’ best.*”**

*Milton Friedman, Capitalism and Freedom, University of Chicago Press, 1962*



## *Why is occupational licensing important*

Since licensing influences many more individuals in the United States and in some other nations than **unions or the minimum wage**, its evaluation should be important for social science researchers, policymakers, and citizens!

# Licensing Wage Effects by Occupation

|                             |  |  |
|-----------------------------|--|--|
| Kleiner (2000)              | Dentists, lawyers, barbers, and cosmetologists | Earnings are higher for licensed occupations that require more education and training relative to comparable unlicensed occupations. |
| Kleiner and Kudrle (2000)   | Dentists                                       | Practitioners in the most regulated states earn 12% more than those in the least regulated states.                                   |
| Tenn (2000)                 | Lawyers  | Low rates of interstate in migration and outmigration, a common effect of licensing, is associated with high wages.                  |
| Angrist and Guryan (2003)   | Teachers                                       | State-mandated teacher testing increases teacher salaries.   |
| Timmons and Thornton (2013) | Massage Therapists                             | Licensing raises wages by more than 16 percent   |

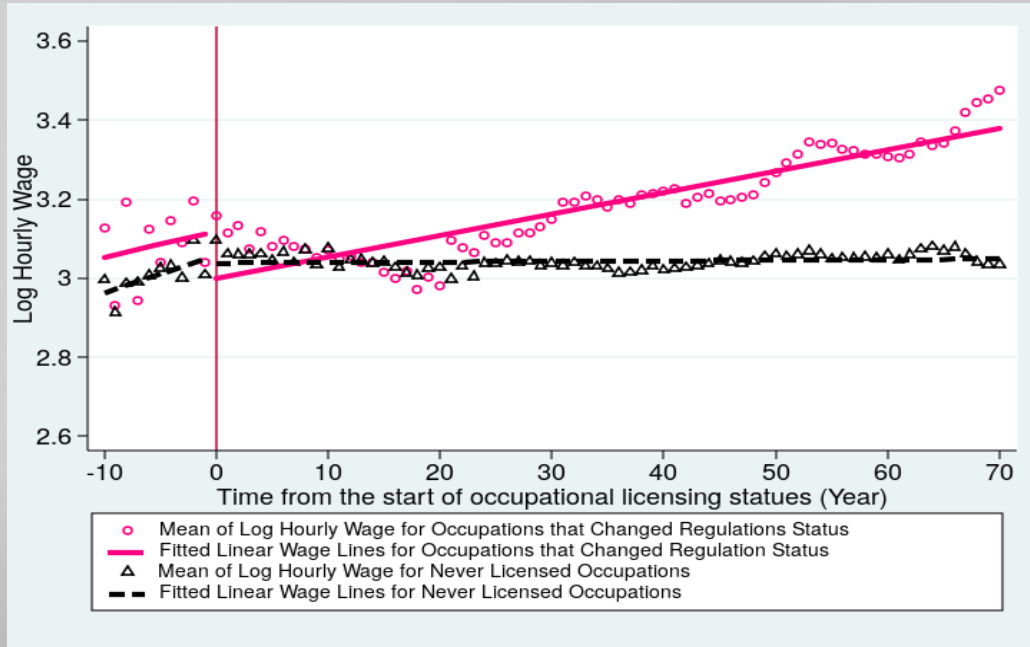
## Aggregate Impacts and Influence on Wages Attainment

- Kleiner and Krueger, 2010 and 2013, 15% +
- Kleiner and Volotnikov, 2017, 11 %
- Gittleman, Klee and Kleiner, forthcoming 9%

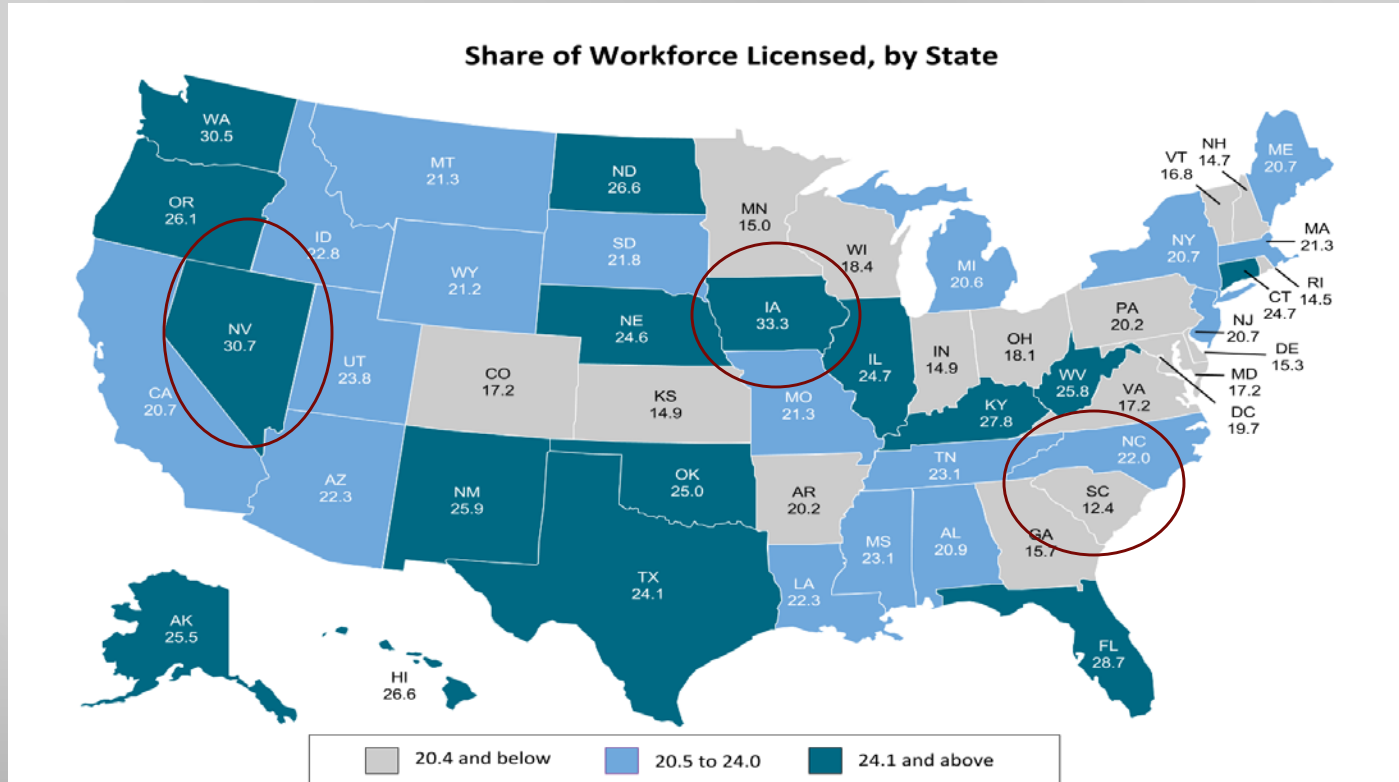
## Coverage

- Redbird, 2017, no effect

# Plotting the Relationship between Earnings and Duration of Licensing Coverage in the U.S. (Han and Kleiner, 2017)



# Harris Survey Estimates of Percent Licensed by State

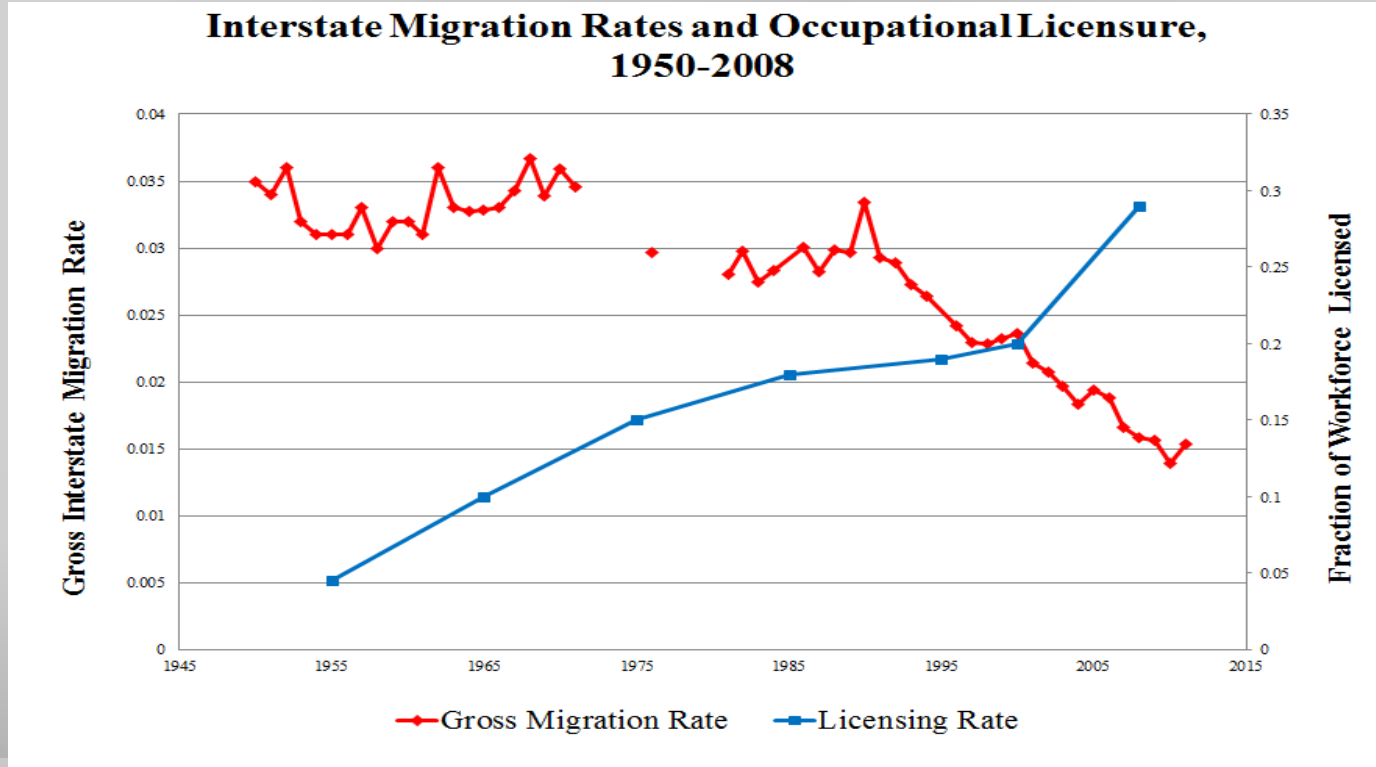


Source: Kleiner and Vorotnikov (2015) based on an analysis of data from a Harris poll of 9,850 individuals conducted in the first half of 2013.  
Note: The three categories were constructed to contain roughly the same number of states.

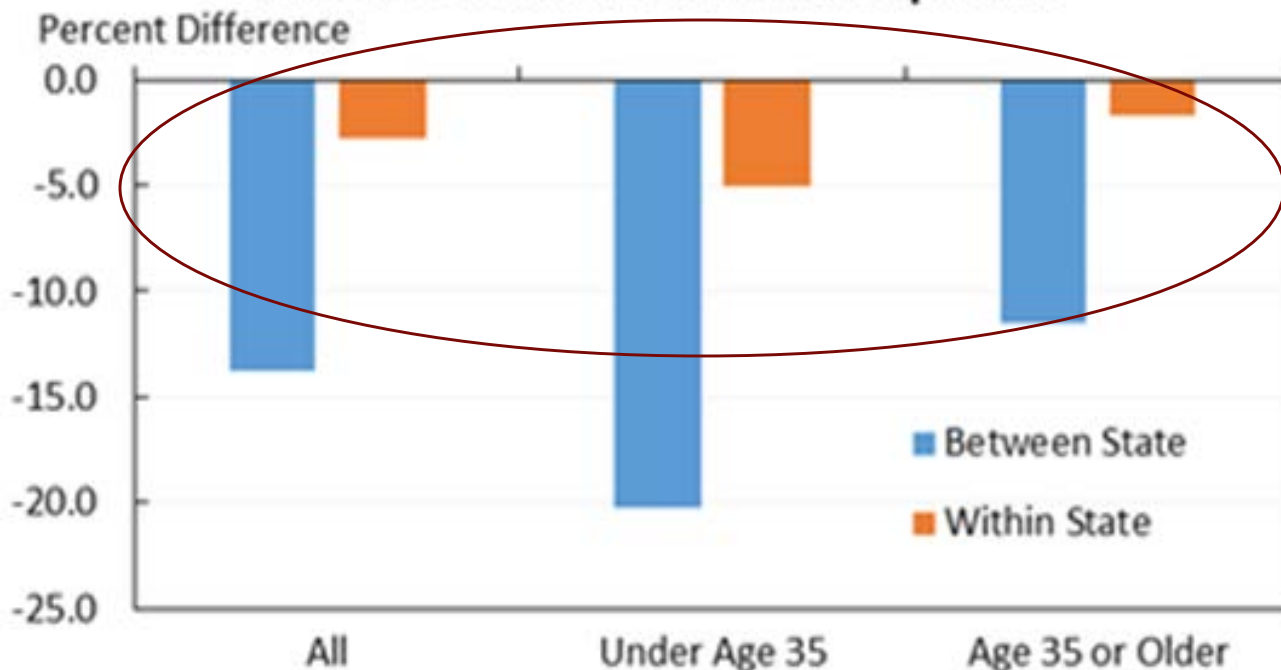
# Does Occupational Licensing Reduce Interstate Migration in the U.S.?

(Johnson and Kleiner, 2017)

)



## Difference in Migration Rates of Workers in Most vs. Least Licensed Occupations



Source: Census Bureau, American Community Survey 2010-2013 ; CEA Calculations. Number is calculated from an OLS regression controlling for race, citizenship, sex, citizenship, number of children, marital status, education, income, year, and state. Ages 25 to 65 were included.

# Influence on Prices (from White House Report, 2015)

## Occupational Licensing raises prices



**Research Appendix Table 2. Studies on the Price Effects of Licensing**

| Paper                     | Licensed Occupation | Type of Licensing Restriction Studied  | Type of Price Studied                      | Percent Impact  |
|---------------------------|---------------------|--|--|-----------------|
| Kleiner et al. (2014)     | Nursing             | Medium level of regulation   | Price of well-child medical exams          | 6.0             |
| Kleiner et al. (2014)     | Nursing             | High level of regulation   | Price of well-child medical exams          | 16.0            |
| Kleiner and Todd (2009)   | Mortgage Brokers    | An additional \$100,000 in state broker bonding/net worth requirement          | Probability that a mortgage is high-priced | 5.4pp           |
| Kleiner and Todd (2009)   | Mortgage Brokers    | Index of other state broker licensing requirements                             | Probability that a mortgage is high-priced | No effect       |
| Kleiner and Kudrle (2000) | Dentistry           | Pass rate of dental exam   | Price of filling a cavity                  | -1.0            |
| Kleiner and Kudrle (2000) | Dentistry           | High level of regulation (no reciprocity or endorsement)                       | Price of filling a cavity                  | 11.0            |
| Kleiner and Kudrle (2000) | Dentistry           | Restriction index based on regulation and pass rate levels relative to average | Price of filling a cavity                  | No effect       |
| Liang and Ogur (1987)     | Dentistry           | Restrictions on number of hygienists and assistants or their functions         | Price of dental visit in 1970              | 5.0             |
| Liang and Ogur (1987)     | Dentistry           | Restrictions on number of hygienists and assistants or their functions         | Price of dental visit in 1982              | 7.0             |
| Conrad and Sheldon (1982) | Dentistry           | Limited reciprocity  | Price index of dental services             | 3.3             |
| Conrad and Sheldon (1982) | Dentistry           | Restrictions on the number of branch offices                                   | Price index of services                    | 4.0             |
| Conrad and Sheldon (1982) | Dentistry           | Restrictions on the number of hygienists                                       | Price index of services                    | 4.0             |
| Shepard (1978)            | Dentistry           | No reciprocity (ability to   | Prices of 12 different dental services     | Ranges from 0.2 |



# Direct Quality Effects

- Health Care Sector
  - ✓ Early Midwifery and Maternal Mortality (Anderson et al. 2016)
  - ✓ Dentistry and Dental Outcomes (Kleiner & Kudrle 2000)
  - ✓ Nurse Practitioners and Infant Mortality (Kleiner et al. 2016)
- Education
  - ✓ State Certification Requirements and Teacher Quality (Angrist & Guryan 2007, Larson 2015)
- Service/ Finance Based Occupations
  - ✓ Licensing and Yelp Ratings (Deyo 2016)
  - ✓ Fund Managers and Required Information Disclosure (Berk and van Binsbergen, 2017)

# **The Effects of Occupational Licensure on Competition, Consumers, and the Workforce: Empirical Research and Results**



## *Licensing Occupations: An Overview*

- Thank you for your attention!

# The Effects of Occupational Licensure on Competition, Consumers, and the Workforce: Empirical Research and Results





Dr. Edward Timmons  
Saint Francis University  
Director, Knee Center for the Study of Occupational Regulation  
November 7<sup>th</sup>, 2017



# Occupational licensing research

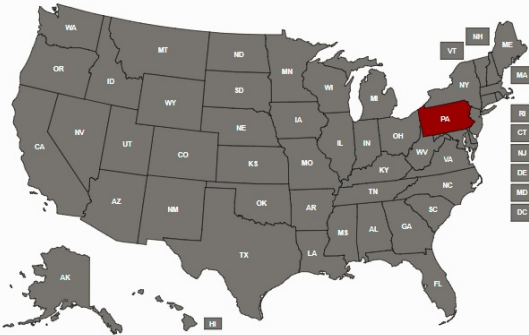
- [csorsfu.com](http://csorsfu.com)
- Removal of licensing
- Non-physician scope of practice
- Licensing and economic mobility

# csorsfu.com

Home **Find Occupations** News & Events  Legislation About CSOR Contact 

Occupation Categories: Healthcare Practitioners and Technical Occupations  Occupations: Perfusionists  Get Data: [Register to download](#)

LOGIN REGISTER



## Regulations

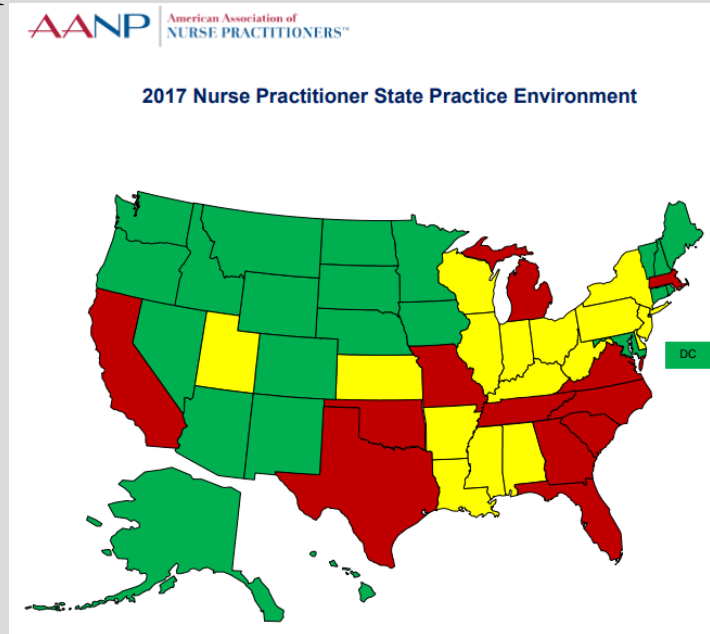
|                 |  |
|-----------------|--|
| Source Link     | <a href="#">Source Link</a><br><a href="#">Source Link</a> |
| Year Licensed   | 2008   |
| Licensing Fees  | 50   |
| High School/GED | Yes  |
| Degree          | Yes<br>Masters Degree                                      |

# Removal of licensing

- Barbers in Alabama
- Hair braiders in Virginia
- Tracking de-licensing

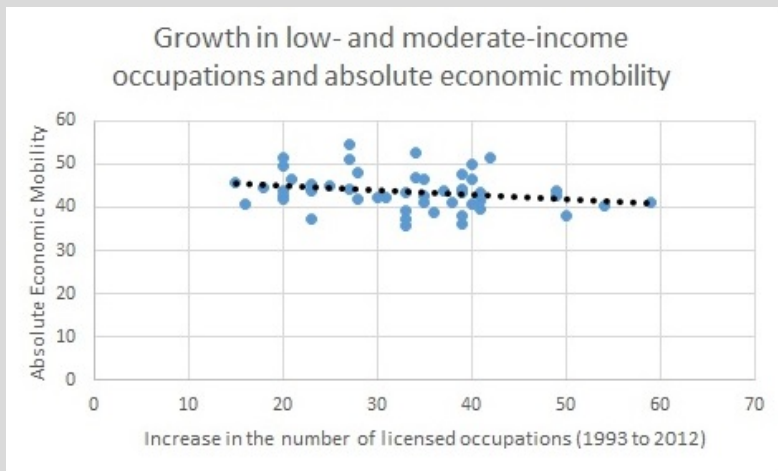
# Non-physician scope of practice

- Nurse practitioner scope of practice and autonomy
- Physical therapist direct access



# Licensing and economic mobility

- Low-income licensing and economic mobility
- Preliminary evidence of a negative correlation



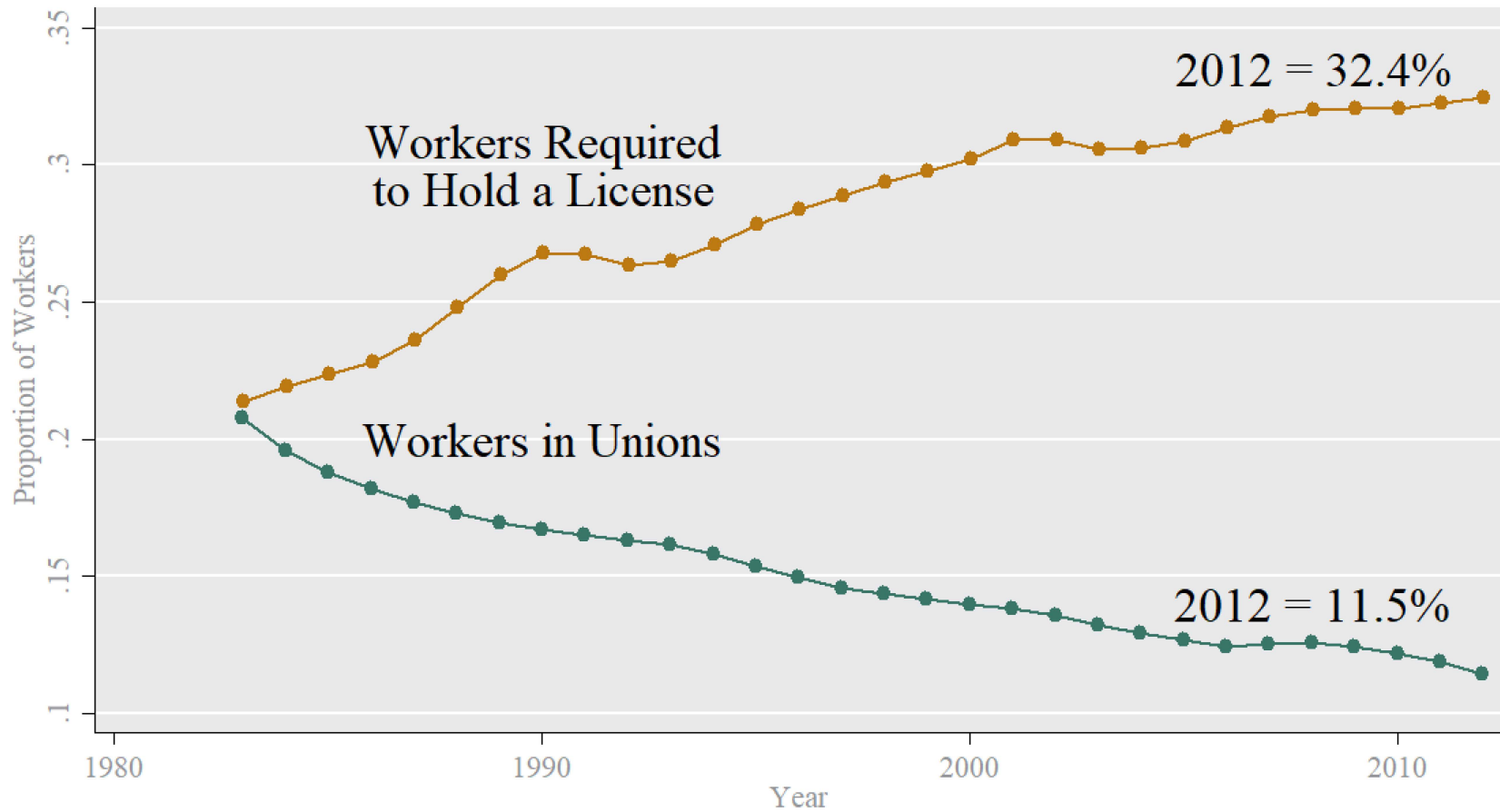


# The Economic and Structural Effects of Occupational Licensure

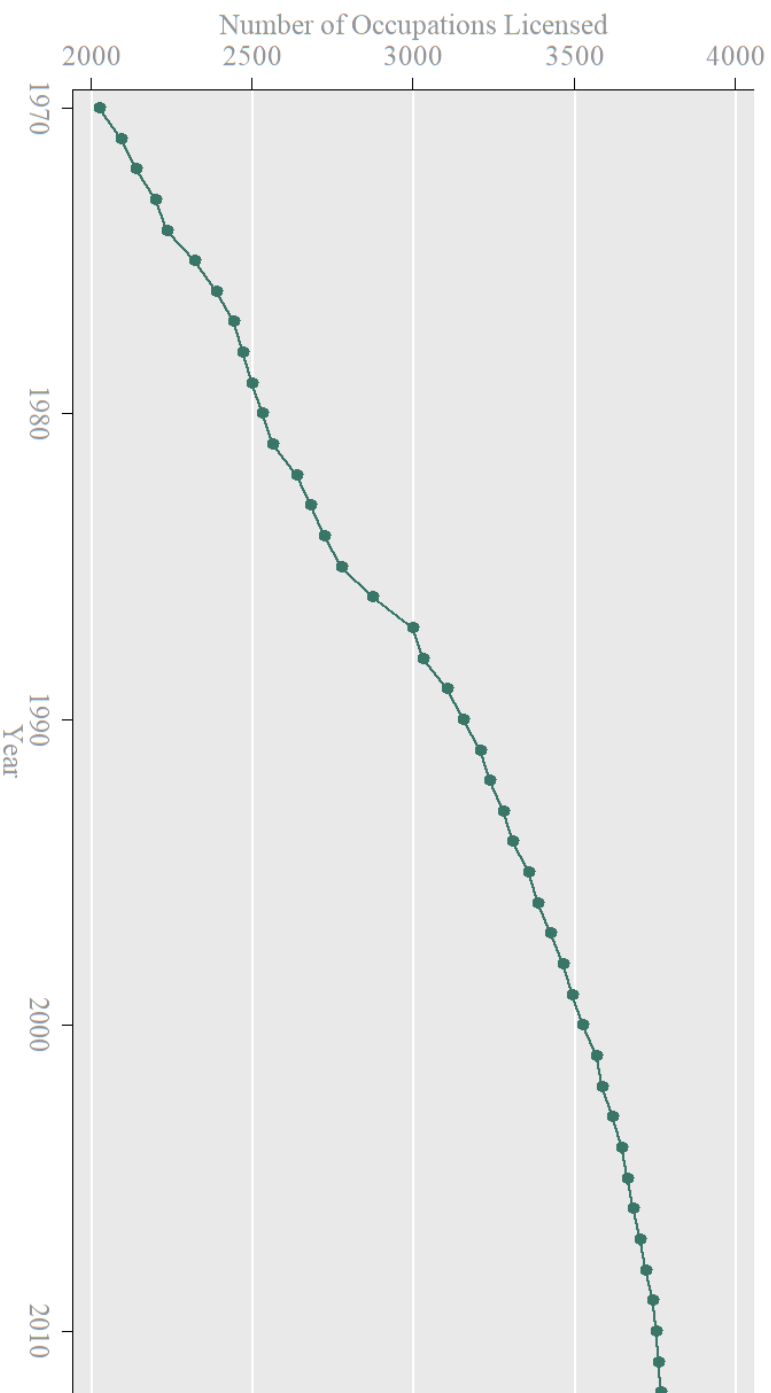
Beth Redbird, PhD

Assistant Professor

NORTHWESTERN UNIVERSITY



# Growth in Licensing Laws



# This Study

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340 Occupations

1,741 New Laws

50 States

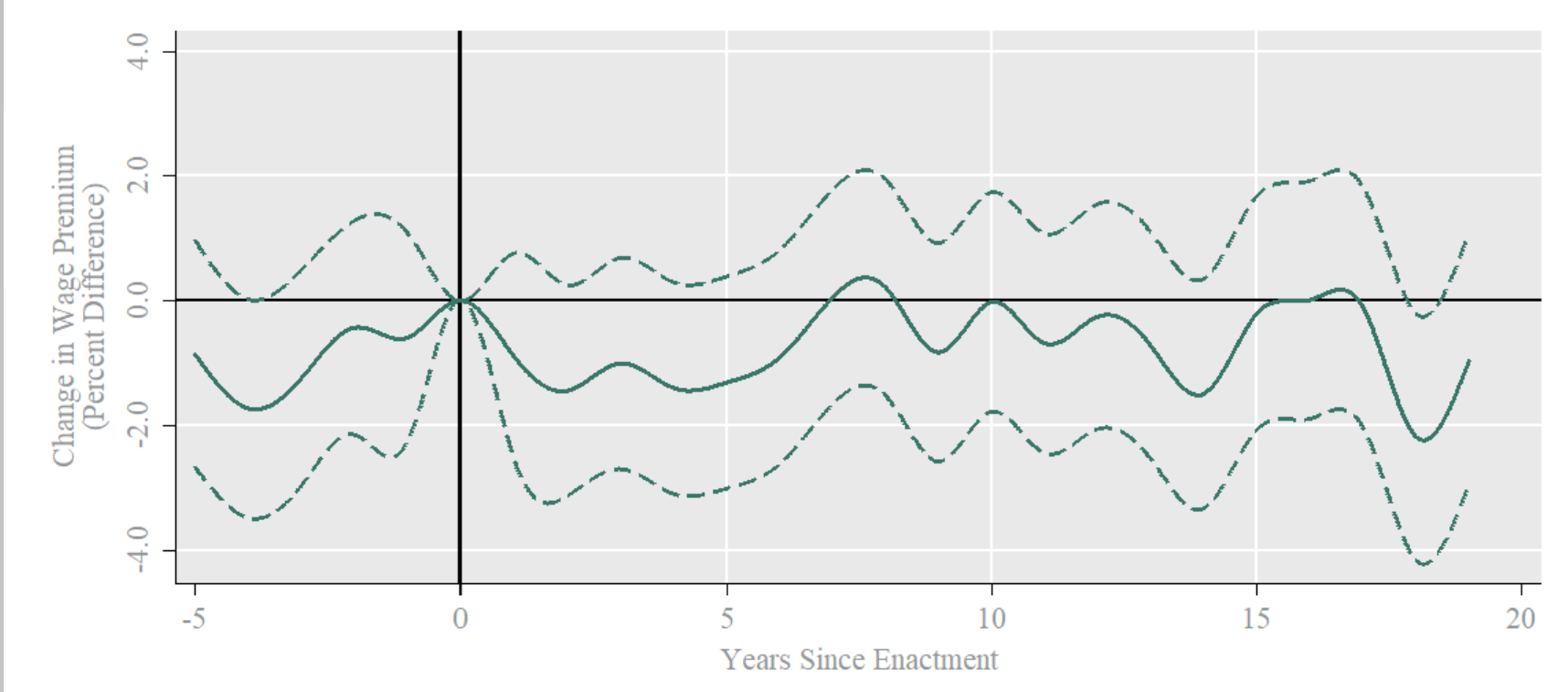
1970-2012

# Unlicensed

# Licensed

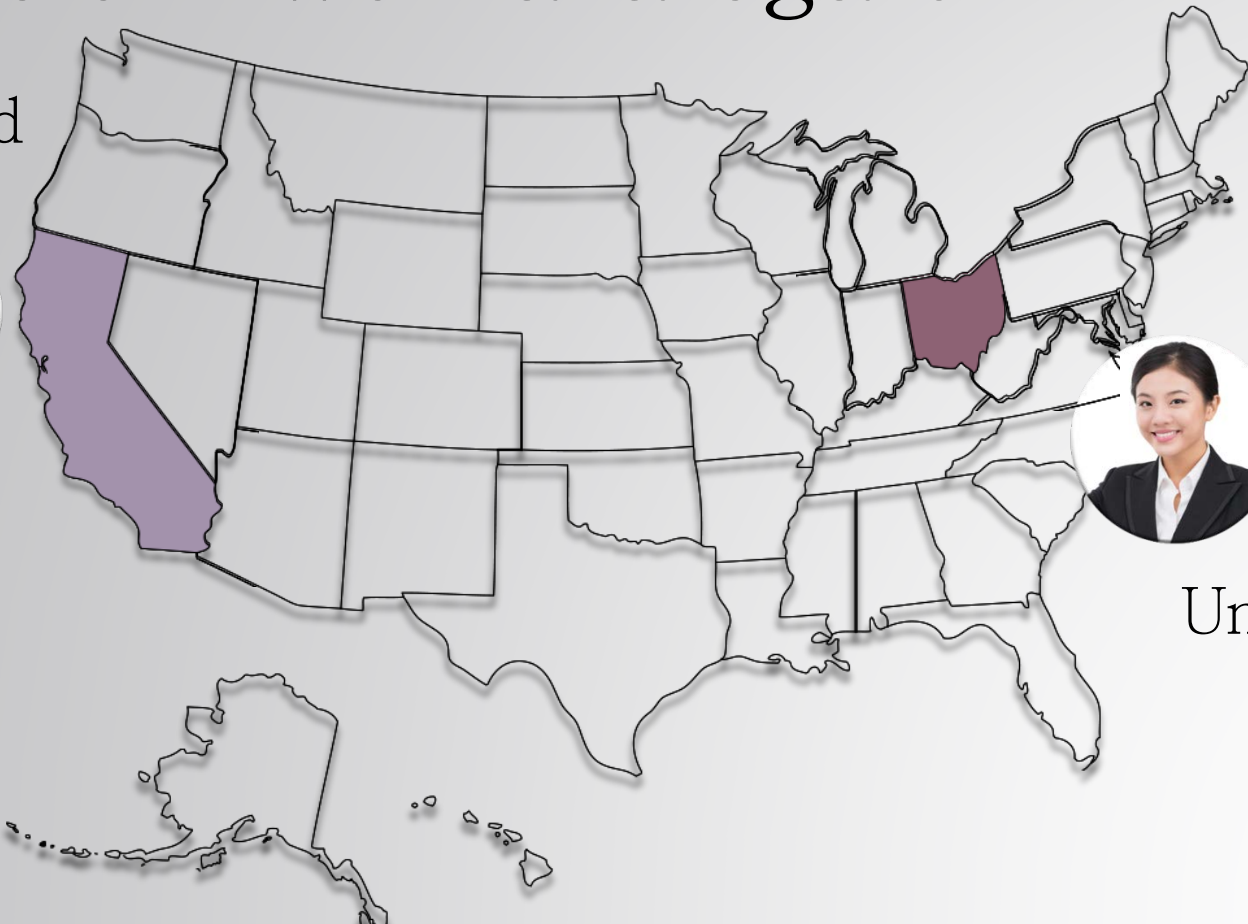


# Wages After Enactment



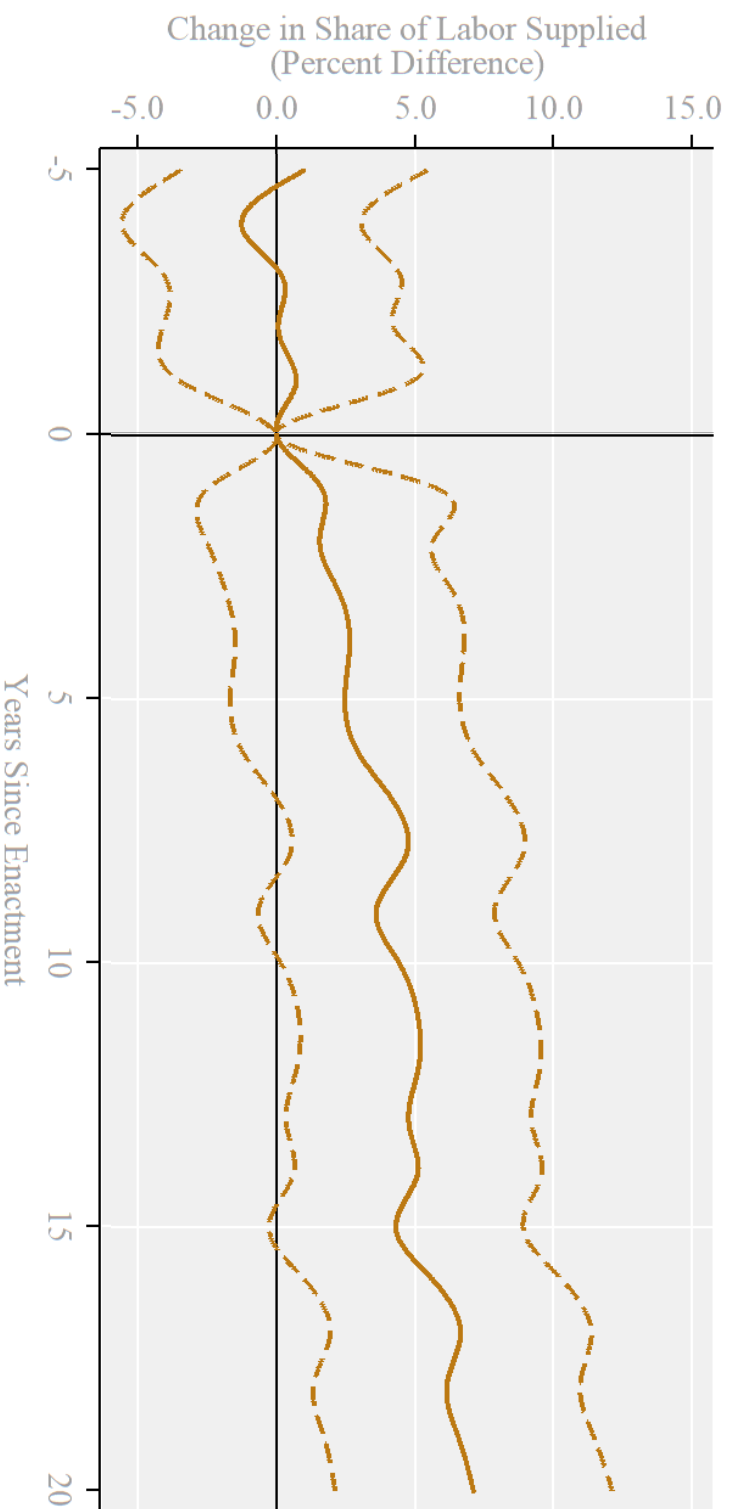
# A Tale of Two Paralegals

Licensed



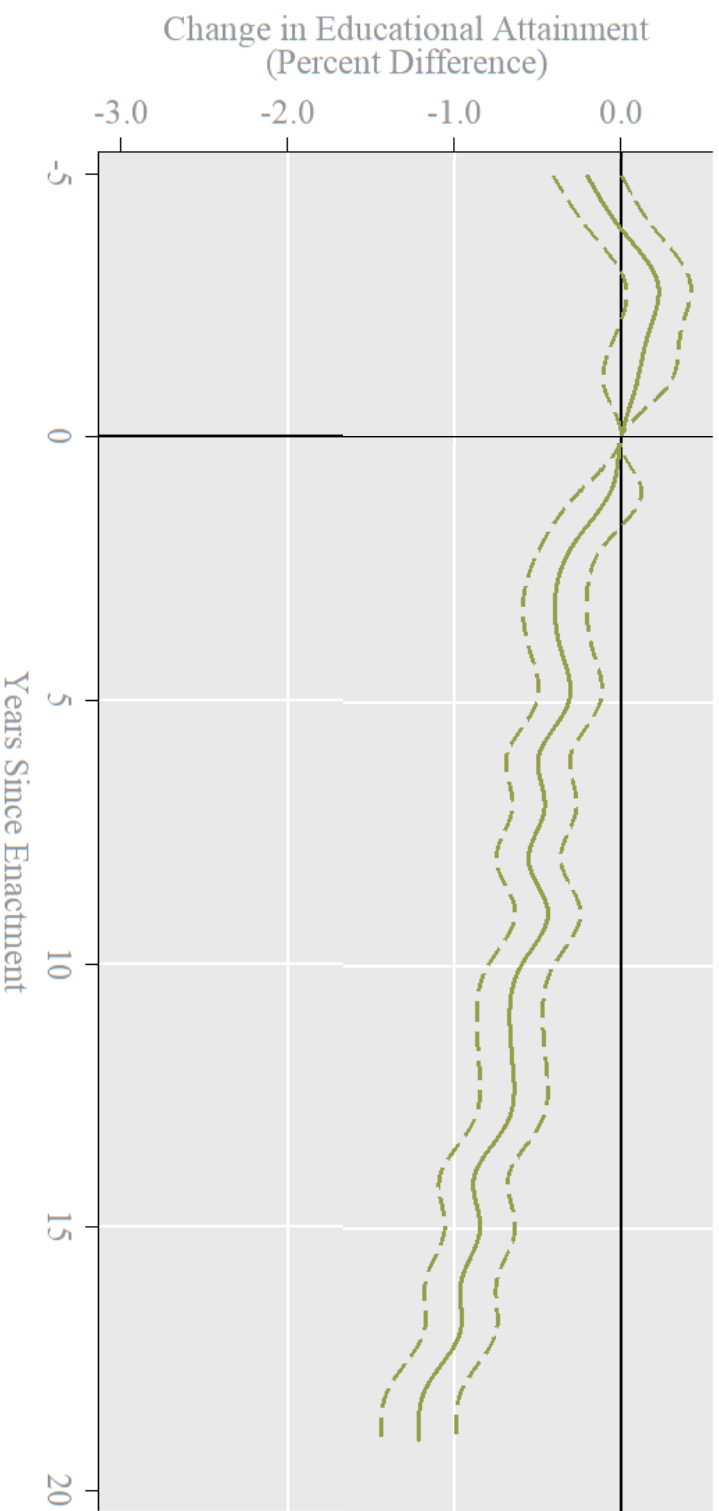
Unlicensed

# Decrease Supply?

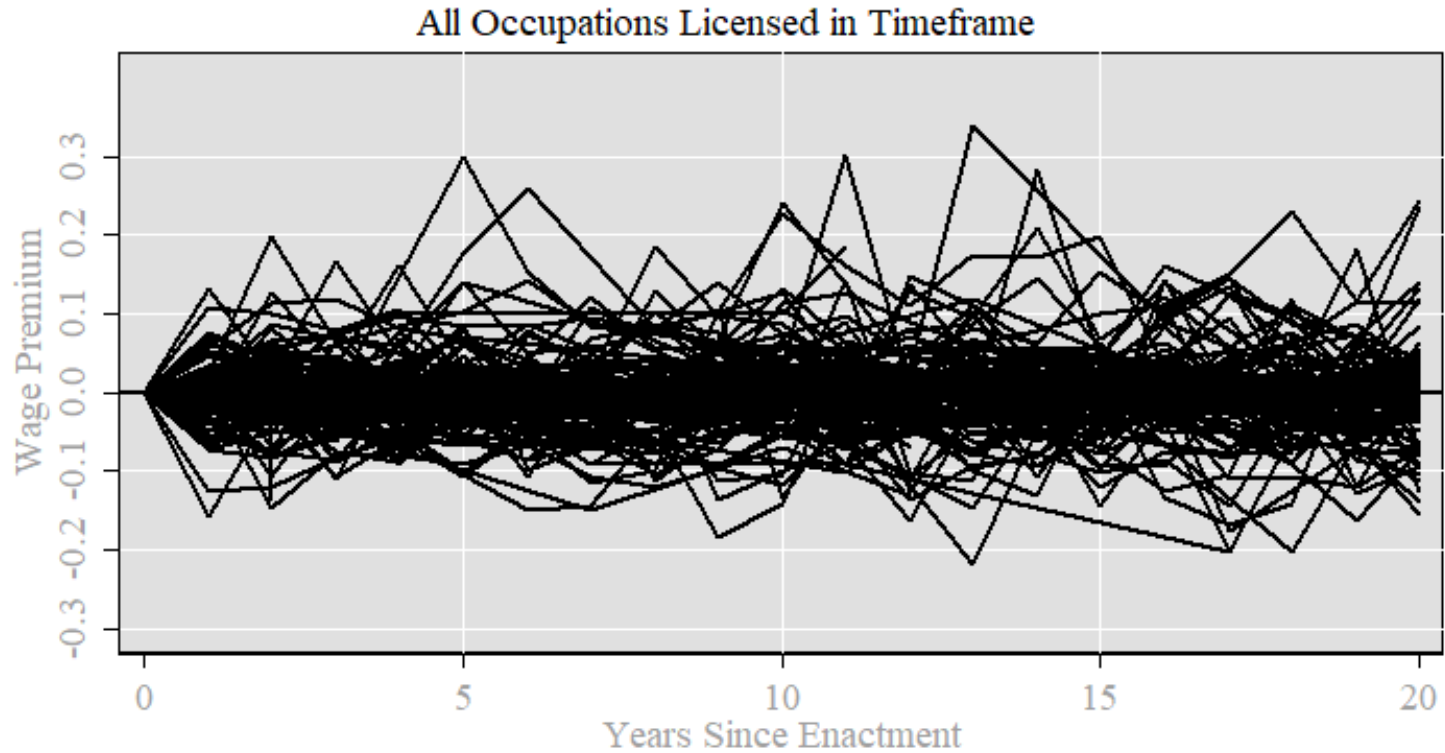




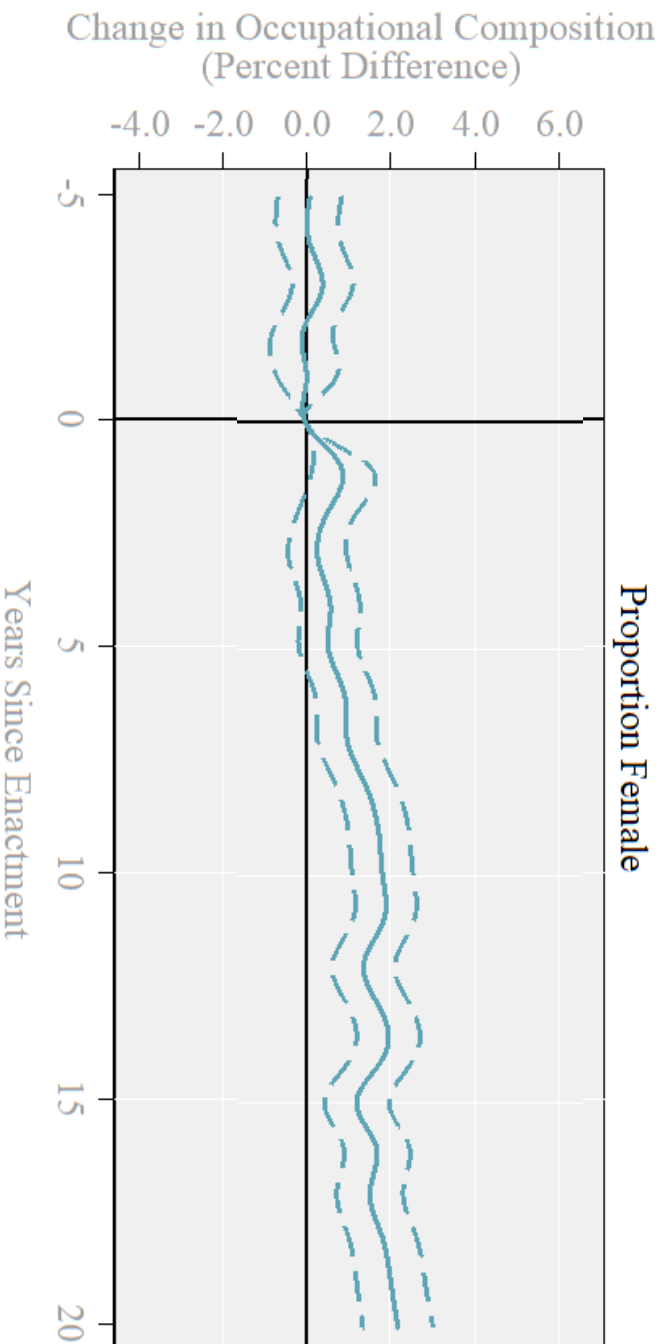
# Increase Quality?



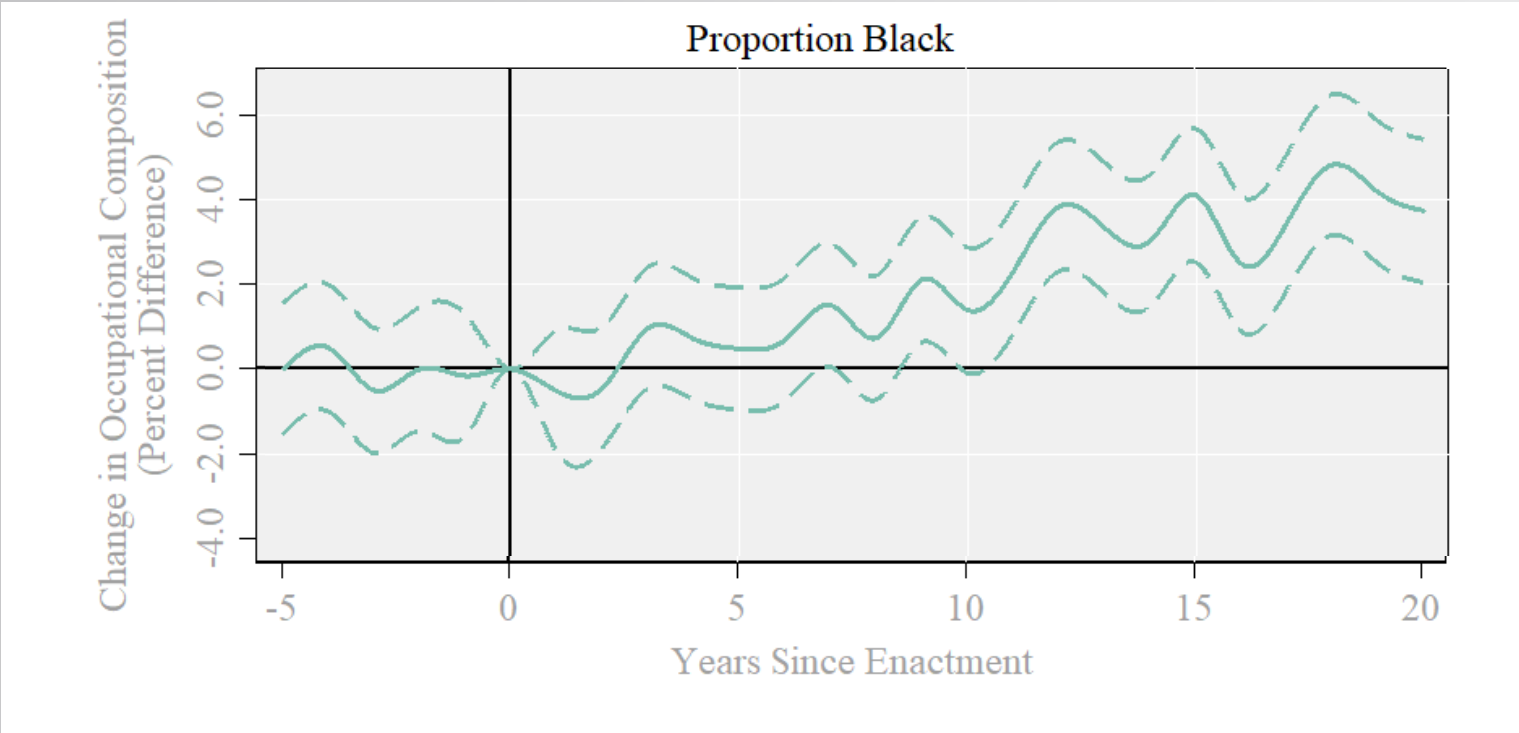
# Results Vary

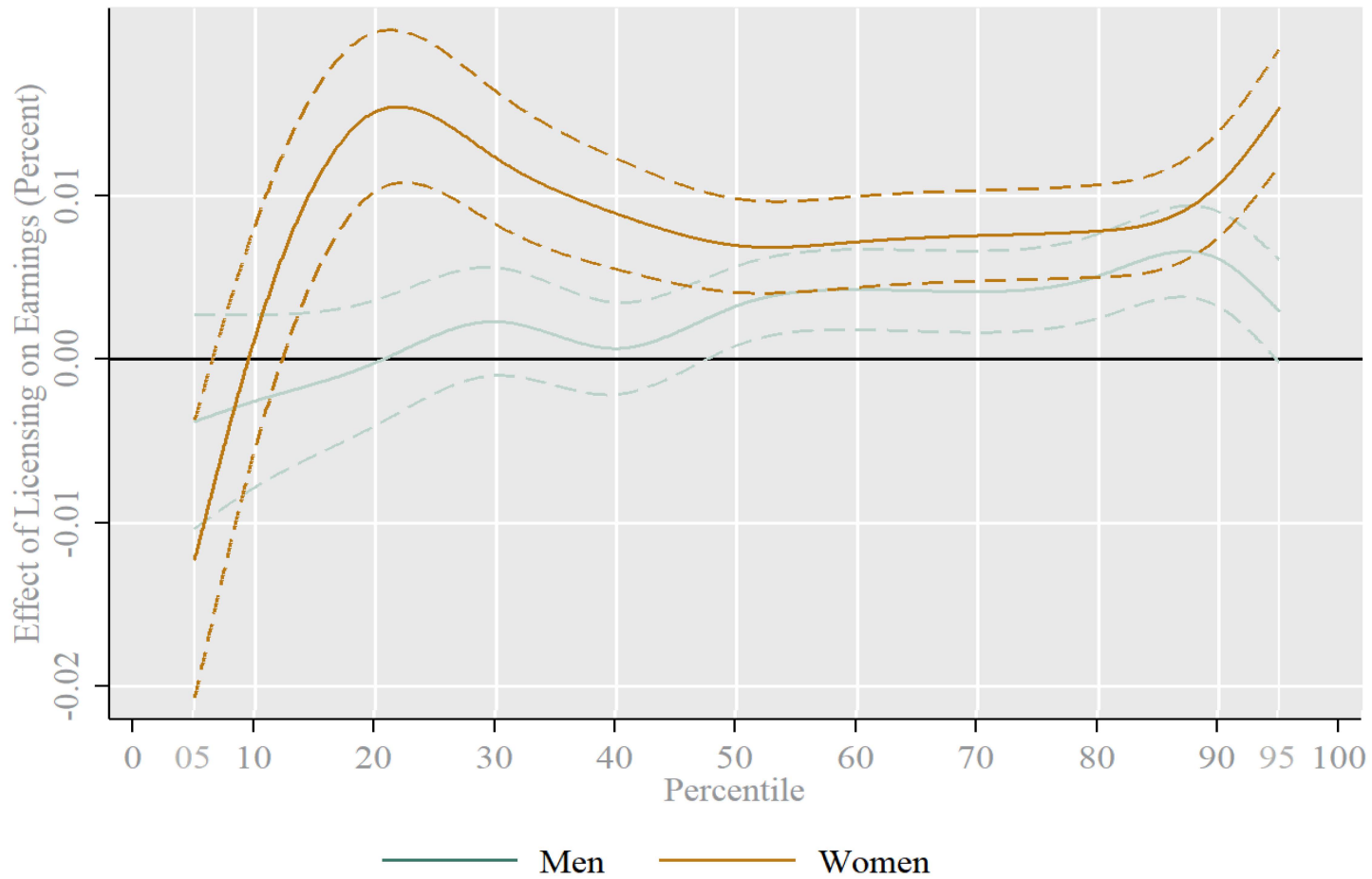


# Increased Access

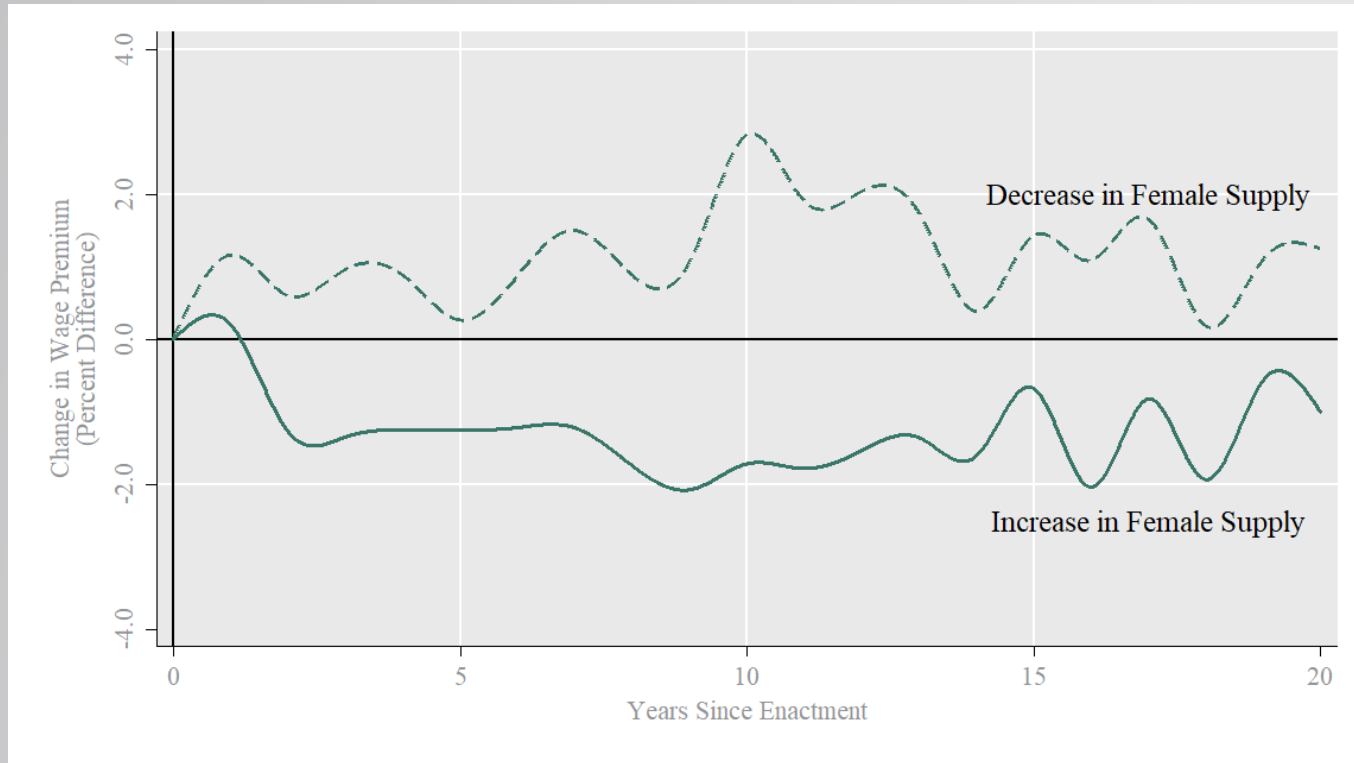


# Increased Access





# What Happened?



# Where does licensing appear?

| 1,734 New Licensing Laws       |           |
|--------------------------------|-----------|
| Mixed Control                  | 0.01      |
| Republican Control             | -0.41 *** |
| Unionized                      | 0.97 ***  |
| Vocational Education Available | 1.36 ***  |
| Education Level                | 0.14 ***  |
| Deals with Customers           | 0.04 ***  |
| Dangerous Conditions           | 0.01 ***  |
| Error are Significant          | 0.04 ***  |
| Hazardous Materials            | 0.01 ***  |
| Physical Labor                 | -0.01 *** |

legend: \* p<.05; \*\* p<.01; \*\*\* p<.001

Policy Goal

Consumer Surplus

Consumer +  
Producer Surplus

Does information asymmetry prevent  
market from existing?

Does information asymmetry prevent  
market from existing?

No

Yes

No

Yes

Wage elasticity skilled labor supply

Wage elasticity skilled labor supply

Lo

Hig

w

h

License

Certify

License

Certify

License

Minimal  
certification so  
market exists

License

Certify

License

Minimal  
certification so  
market exists

