



The Economics of Occupational Licensing

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Public protection & barrier to entry

- Licensing is both public protection and barrier to entry
- Health and safety concerns do not explain all the details of licensing policy
 - Substantial variation across states in the strictness of licensing rules
 - Many licensing requirements not plausibly linked to safety concerns
 - Licensed workers enjoy advantages over unlicensed even after adjusting for human capital and other differences
- The tasks that licensed workers are permitted to undertake (e.g., scope of practice) matter for competition
- Details of licensing rules also matter for outcomes like interstate migration

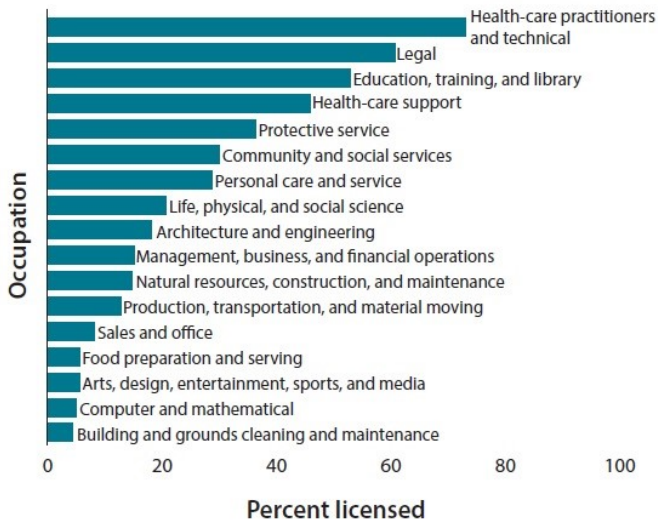
Background

Occupational licensing is a core labor market institution that controls access to employment

- A license is defined as a credential that is legally required for one's job
- Typically but not always imposed by state governments
- More than 20 percent of all employed 25-64 year old workers are licensed
 - Up from about 5 percent in the 1950s
 - Most of the growth is due to an increase in the number of occupations that are licensed (White House 2015)
 - Women are somewhat more likely to be licensed than men
 - Licensing is more common at higher education and income levels
- Licensed workers are broadly distributed across the states

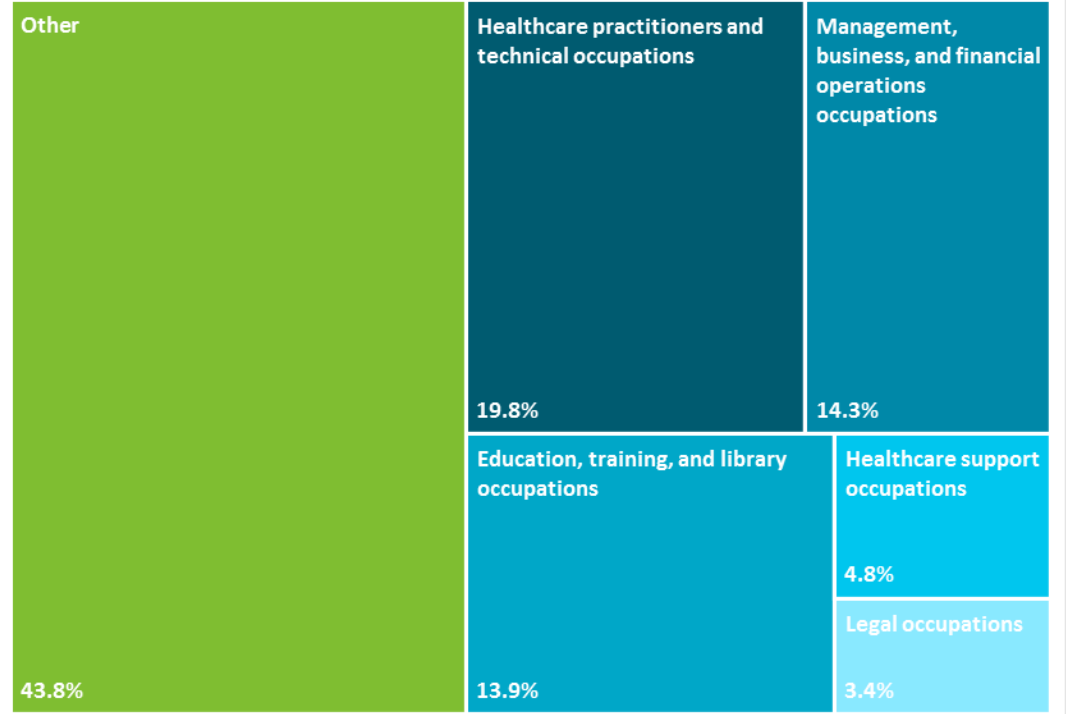
Licensing varies widely across occupations

Licensed Share of Workers, by Occupation



Source: BLS 2016–17; authors' calculations.
 Note: Sample is restricted to employed workers age 25 to 64. We define workers as licensed only if their government-issued credential is required for their job.

Share of Total Licensed Workers



Licensing has effects on wages

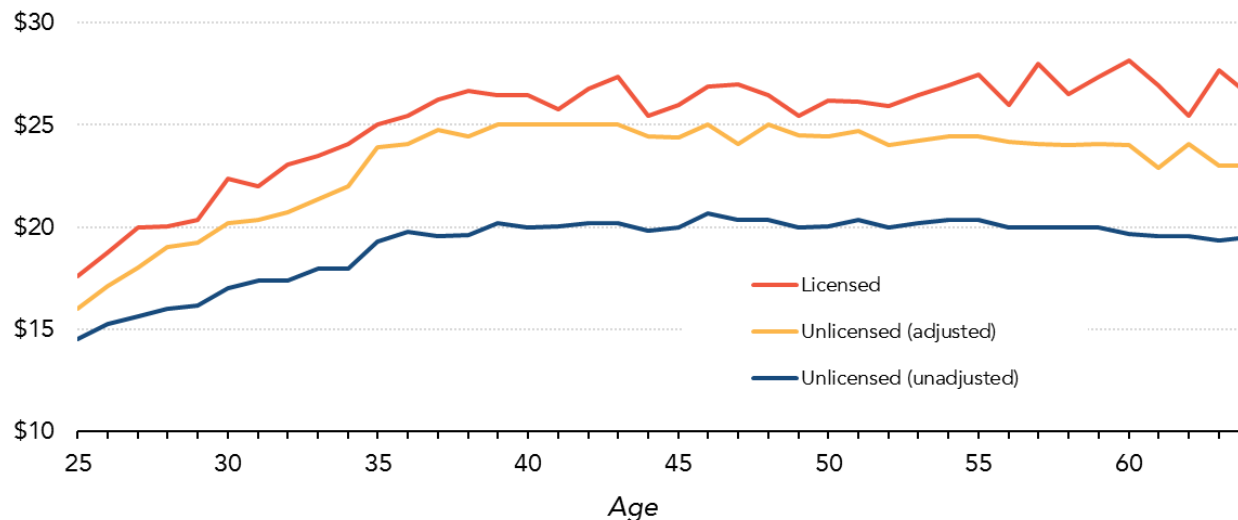
- Substantial wage gap between licensed and unlicensed
 - Much of the gap is related to observable differences between those groups
 - Remaining gap is some combination of lower wages for unlicensed and higher wages for licensed
- Earnings gaps are larger than wage gaps due to higher average hours for licensed workers
- Wage gaps vary quite a bit across occupations
 - Larger for occupations that have been licensed for longer (Han and Kleiner 2016)

Licensing wage gaps

FIGURE 2

Licensing Wage Premium by Age

Median Wage
(2017 \$)

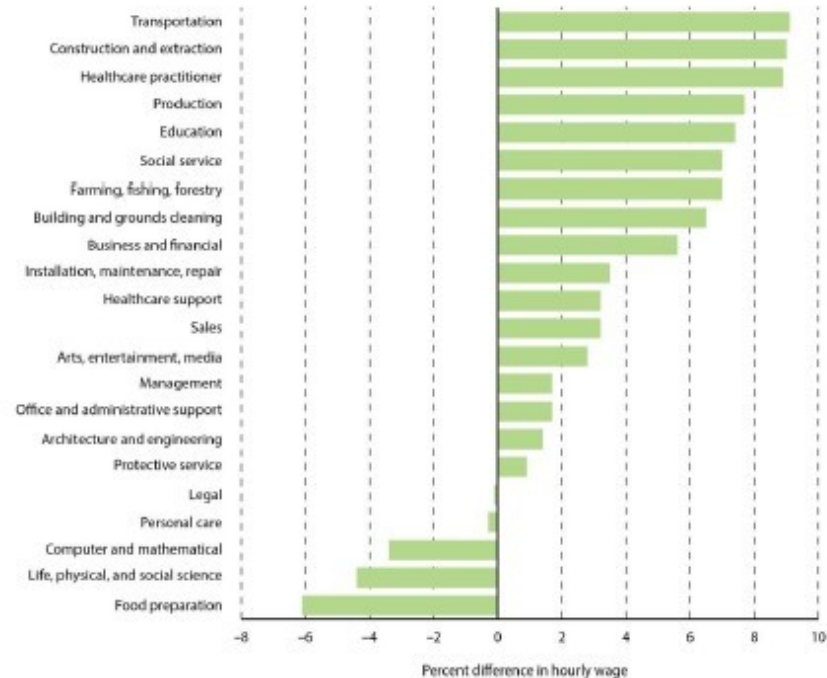


Source: Current Population Survey, Bureau of Labor Statistics 2016-17 and author's calculations.

Note: Estimates for the "unlicensed (adjusted)" series are derived from a DiNardo, Fortin, and Lemieux reweighting with controls consisting of gender, race, quadratic expressions of both age and years of education, union coverage, self-employment status, region, and public sector status. Sample weights are used throughout. The sample consists of 25-64 year old employed workers with wages between \$5 and \$100 per hour. Earnings are adjusted to 2017 dollars using the CPI-U-RS.

Licensing wage gaps

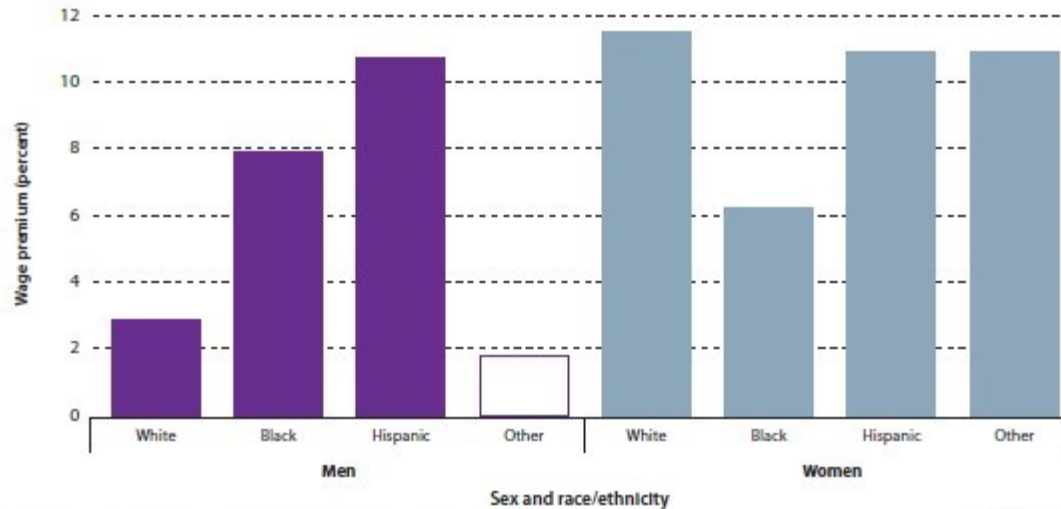
FIGURE 2.
Differences in Wages of Licensed and Unlicensed Workers, by Occupation



Source: Current Population Survey; authors' calculations. Estimate adjust for work experience, detailed occupation, education, gender, and race. Sample is restricted to workers age 25 to 64.

Licensing wage gaps

FIGURE 3.
Licensing Wage Premium, by Race and Gender



Source: Current Population Survey, Bureau of Labor Statistics 2016–17 and author's calculations.

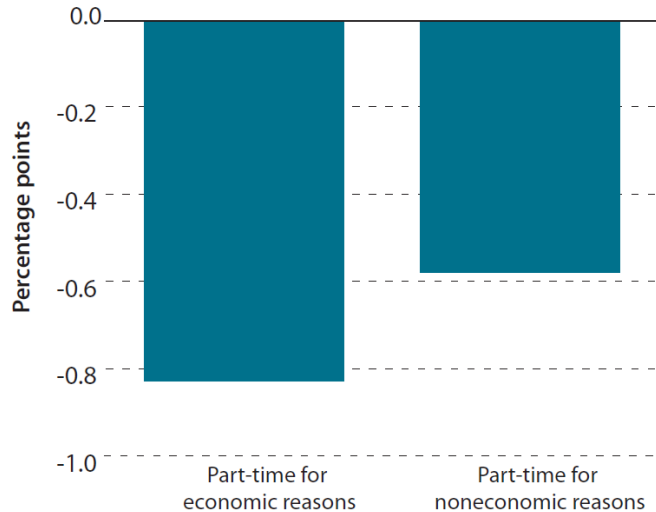
Note: Estimates are derived from median regressions with controls consisting of quadratic expressions of both age and years of education, union coverage, geographic region, and public sector status. The sample consists of 25–64 year old employed workers with wages between \$5 and \$100 per hour. Robust standard errors (not shown) are clustered at the state level. Categories are mutually exclusive.

Licensing has effects on employment and non-wage outcomes

- Total employment tends to be lower when licensing exists (or is more stringent)
 - Blair and Chung (2018) find 17-27% lower labor supply on licensed side of state borders
 - Several studies have found negative employment effects for particular occupations (e.g., manicurists in Federman, Harrington, and Krynski 2006)
- As with wages, we see gaps in non-wage labor market outcomes

Non-wage differences

Licensing and Part-time Work

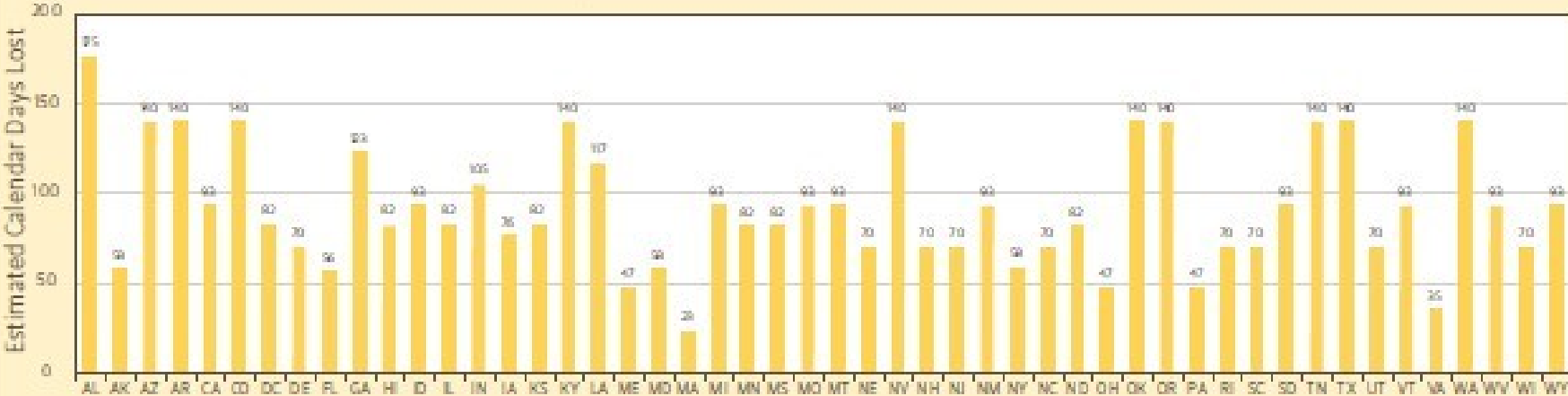


- Licensed workers experience lower unemployment
- Licensed workers are less likely to work part-time (voluntarily or involuntarily)

Source: Current Population Survey, Bureau of Labor Statistics 2016–17 and author's calculations.
Note: Estimates are derived from linear regressions with controls consisting of gender, race, quadratic expressions of both age and years of education, union coverage, self-employment status, geographic region, and public sector status. Note that hourly wages are not included among the covariates. Part-time status definitions follow BLS conventions. The sample consists of 25–64 year old employed workers.

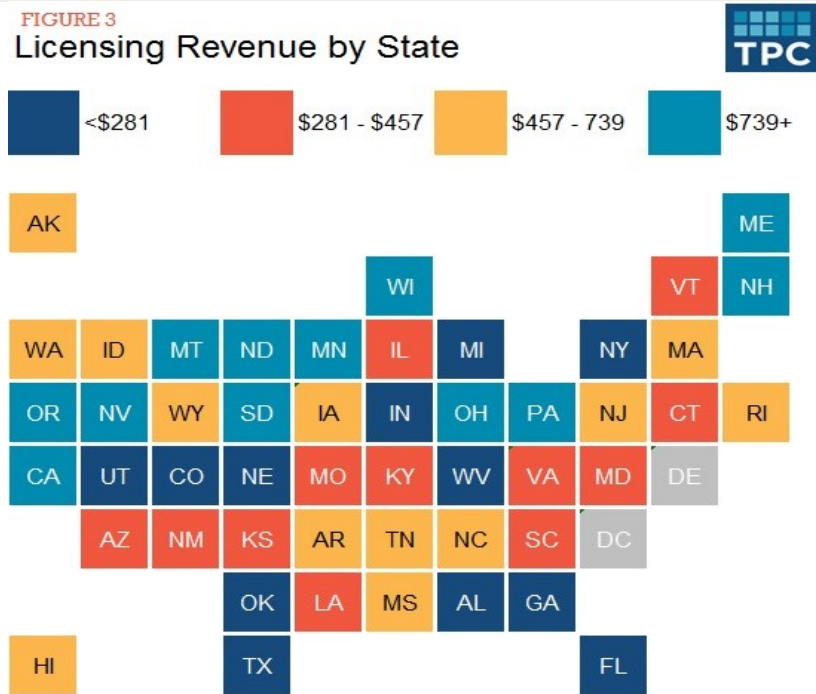
State licensing requirements differ dramatically

Manicurist, Licensed in 50 states



There is also wide variation in state revenues

FIGURE 3
Licensing Revenue by State



- Per-worker revenues
 - Highest in some Western and Great Lakes states
 - Lowest in the Southeast and Southwest
- Includes both initial and continuing licensing fees
- Less reliable for agriculture-intensive states, as some agricultural fees are included in dataset

Source: Current Population Survey, Annual Survey of State Government Tax Collections, and author's calculations

Note: Revenues are an average for 2016 and 2017. The worker sample consists of 25-64 year old employed workers. Earnings are adjusted to 2017 dollars using the CPI-U-RS. Delaware is omitted due to its outlier status as a state with relatively large non-licensing revenue included in the T28 variable. The analysis also excludes the District of Columbia.

Differences in state requirements contributes to lower interstate migration

Differences in Likelihood of Moving for Licensed and Certified Workers



- Johnson and Kleiner (2017) find that interstate mobility is reduced when licensing exam requirements vary across states
- Both geographic and job-to-job mobility are often key for wage growth (Nakamura et al. 2017; Haltiwanger et al. 2018)

Source: BLS 2016–17; authors' calculations.

Note: Sample is restricted to workers age 25 to 64. We define workers as licensed only if their government-issued credential is required for their job. Estimates adjust for age, education, gender, and race.



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The current policy discussion

- Patently indefensible licensure (e.g., floristry) vs. all other licensure
 - The rhetoric can appear radical, but it may have less scope than generally believed
 - Hard to claim that there is zero possibility for public harm from unlicensed practice
- Better to discuss: what is the optimal type and content of occupational regulation in each particular case?
 - This may result in more radical change because it has much wider scope
 - The possibility (or even demonstrated reality) of public safety risks only justifies narrowly tailored rules that maximize net benefits

The current policy discussion, ctd.

- Increasing understanding that licensing affects groups differently:
 - For example, people with criminal records, workers with international credentials, military veterans and spouses, etc.
 - Wage premiums are different by race and gender (Blair and Chung 2017) but not clear how to interpret
- Robust discussion of licensing in context of antitrust and competition policy
 - Currently centering on scope of practice reform in the health-care sector
- Need more emphasis on licensing as an impediment to entrepreneurship and reorganization of work

White House (2015) best practices

- Limit licensing requirements to those that are necessary for protection of public health and safety
 - Consider alternative regulatory mechanisms in situations where they would be adequate to protect the public
 - Minimize procedural burdens of acquiring a license
 - Maximize scope of practice, consistent with competency and training
 - Remove unnecessary burdens for specific groups like those with criminal records
- Apply rigorous cost-benefit analysis to all licensing provisions
 - Strengthen states' sunrise and sunset review processes
- Harmonize licensing requirements across states to the extent possible

Directions for continued reform

- Subject licensure proposals to rigorous cost-benefit analysis
 - Consider alternative, less-burdensome occupational regulations
 - Narrowly focus licensure rules on legitimate health and safety risks
 - Avoid unnecessary burdens for disadvantaged groups
- Work toward reciprocity across states
- Overarching goals:
 - Minimize barrier to entry associated with licensure
 - Maximize scope for competition
 - Accommodate progress in technology and business methods