The Future of Occupational Licensing

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• 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

- I define licensing as a credential that is legally required for one’s job
- 22 percent of all employed 16+ 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

Share of Total Licensed Workers

- **Other**: 43.8%
- **Healthcare practitioners and technical occupations**: 19.8%
- **Management, business, and financial operations occupations**: 14.3%
- **Education, training, and library occupations**: 13.9%
- **Healthcare support occupations**: 4.8%
- **Legal occupations**: 3.4%

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.
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)
FIGURE 2
Licensing Wage Premium by Age

Median Wage (2018 $)


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, excluding observations with Census-allocated wage and earnings. Earnings are deflated using the CPI-U-RS.
Licensing wage gaps

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

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percent difference in hourly wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>-4</td>
</tr>
<tr>
<td>Construction and extraction</td>
<td>-3</td>
</tr>
<tr>
<td>Healthcare practitioner</td>
<td>-2</td>
</tr>
<tr>
<td>Production</td>
<td>0</td>
</tr>
<tr>
<td>Education</td>
<td>2</td>
</tr>
<tr>
<td>Social service</td>
<td>4</td>
</tr>
<tr>
<td>Farming, fishing, forestry</td>
<td>6</td>
</tr>
<tr>
<td>Building and grounds cleaning</td>
<td>8</td>
</tr>
<tr>
<td>Business and financial</td>
<td>10</td>
</tr>
<tr>
<td>Installation, maintenance, repair</td>
<td>-1</td>
</tr>
<tr>
<td>Healthcare support</td>
<td>0</td>
</tr>
<tr>
<td>Sales</td>
<td>2</td>
</tr>
<tr>
<td>Arts, entertainment, media</td>
<td>4</td>
</tr>
<tr>
<td>Management</td>
<td>6</td>
</tr>
<tr>
<td>Office and administrative support</td>
<td>-2</td>
</tr>
<tr>
<td>Architecture and engineering</td>
<td>0</td>
</tr>
<tr>
<td>Protective service</td>
<td>2</td>
</tr>
<tr>
<td>Legal</td>
<td>4</td>
</tr>
<tr>
<td>Personal care</td>
<td>6</td>
</tr>
<tr>
<td>Computer and mathematical</td>
<td>8</td>
</tr>
<tr>
<td>Life, physical, and social science</td>
<td>10</td>
</tr>
<tr>
<td>Food preparation</td>
<td>12</td>
</tr>
</tbody>
</table>

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

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

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.
Licensing requirements differ widely across states.
There is also wide variation in state revenues

- 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
Differences in state requirements contributes to lower interstate migration

- 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)

Differences in Likelihood of Moving for Licensed and Certified Workers

- Percent difference in likelihood
- Move within states vs. Move across states

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.
Licensing in the Health-care Sector
25 percent of licensed workers are in health-care occupations
Licensing in the health-care sector has particularly important impacts

• U.S. spends about 18 percent of GDP on health-care services

• Both wage premiums and licensing prevalence are high in the health-care sector

• It’s not just about whether a worker is licensed: health-care workers interact in ways that are constrained by licensure rules
Licensing restrictions on APRNs & PAs

• SoP restrictions take a number of forms, including:
  • Maximum ratios of APRNs or PAs to supervising physicians
  • Limitations on prescription authority
  • Specific supervisory requirements and collaborative practice agreements with associated fees
• Restrictions depend on the particular state and profession
Nurse practitioner scope of practice

Fully Authorized Scope of Practice for Nurse Practitioners

Note: The map shows states with fully authorized SOP for both practice and prescription authority in 2017.
Licensing policy developments in health care

• General shift toward more expansive scope of practice for advanced practice registered nurses and physician assistants

• Affordable Care Act motivates and interacts with health-care licensing reform
  • Increased demand must be met without impaired patient access to care and dramatically higher costs
  • ACA encouraged reforms like accountable care organizations (ACOs) and bundled payments
    • ACOs and bundled payments may be more efficient when licensing rules are less stringent and ability to reallocate work tasks is maximized
Occupational Licensing Reform Options
Overview of the current policy discussion

• 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 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

• Ongoing efforts to enhance interstate reciprocity or otherwise lower barriers to interstate migration and work
Overview of 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
  - The possibility (or even demonstrated reality) of public safety risks only justifies narrowly tailored rules that maximize net benefits
- Also need more emphasis on licensing as an impediment to entrepreneurship and reorganization of work
Selected recent policy work on licensing

• Obama administration 2015 report
• NCSL, CSG, and NGA multi-state licensing consortium
• Numerous Federal Trade Commission briefs and analyses
• Institute for Justice *License to Work*
• National Employment Law Project work on criminal justice barriers
• NCBSN research on scope of practice in health care
Previous Hamilton Project work on licensing

• Kleiner (Jan 2015) discussed licensing research and made proposals similar to those of 2015 Obama administration report

• Analysis of labor market differences between licensed and unlicensed workers (Nunn 2016; 2018)

• Interaction with criminal justice policy
  • Schanzenbach et al. (2016)
  • Piehl (2016)

• Scope of practice reform for APRNs (Adams and Markowitz 2018)
White House proposed 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
Recent proposals and new legislation/initiatives

• State consortium led by NCSL
  • Aims to enhance interstate reciprocity, among other goals

• Some selected state examples:
  • Arizona and Pennsylvania recognition of out-of-state licenses
  • Nebraska’s Occupational Board Reform Act
    • General review of licensing rules and movement towards less-restrictive alternatives
  • Illinois criminal justice reforms
    • Prevent license forfeiture due to student loan default (2018)
    • Requires relevance of criminal convictions (2016)
Directions for continued reform

• Subject licensure proposals to rigorous cost-benefit analysis
  • Consider alternative, less-burdensome occupational regulations
  • Focus licensure rules on legitimate health and safety risks
  • Avoid unnecessary burdens for disadvantaged groups
• Work toward interstate license recognition
• The overarching goal: minimize barrier to entry associated with licensure (and maximize scope for competition) while protecting public health and safety
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