

# *Measuring Occupational Regulation by Government*

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# *What is Occupational Regulation?*

- Regulation of occupations by the government
- There are generally three types of regulation by the government:
  - ✓ **Registration** (the government provides a list of individuals—much like Angie’s list)
  - ✓ **Certification**, where the government gives a right to title, an example is certified financial analysts, who can only use this title. but others are allowed to provide the service.
  - ✓ **Licensing**, right to practice, requires all who receive pay to get permission from government for providing the service.

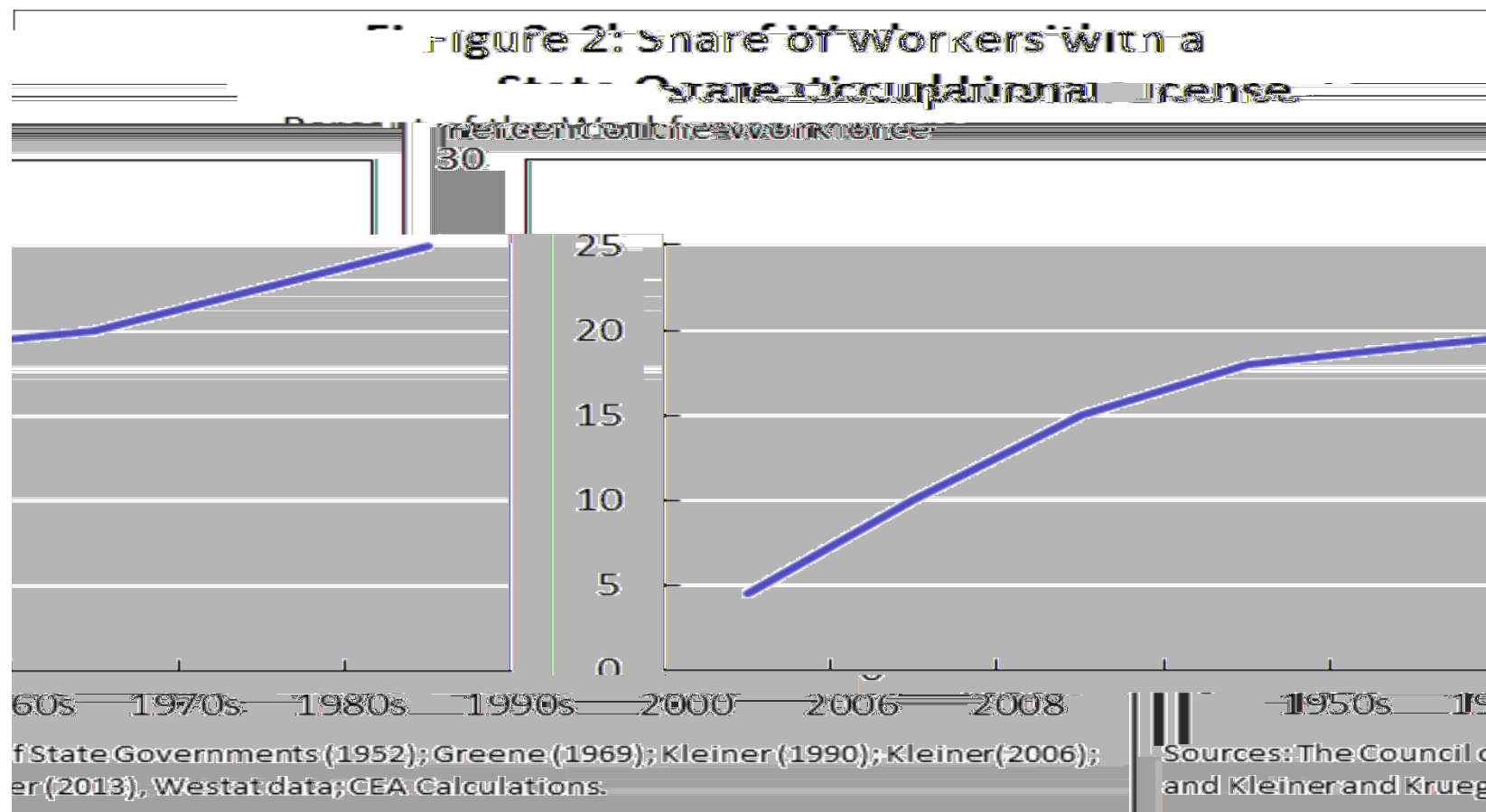
## *Extent of the Regulation\**

- 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

\*Council of State Governments, 2004

# A Framework for Policymakers

## The White House, 2015



# New Forthcoming Data on Occupational Licensing Statutes in the U.S. (Funded by Kauffman and Smith Richardson Foundations)

- This database will include information such as the date when licensing came into effect for that occupation, the requirements to obtain a license, such as **educational requirements, on-the-job training, and licensing fees**
- The database will also include whether the state has any **reciprocity or endorsement policies** in effect, which ease the ability of those licensed in an occupation in a particular state to become licensed in another state or states
- The database will also include historical information on the **evolution of licensing statutes for each occupation and state, including whether major licensing requirements or agreements have changed over time and the date and specific content of such changes.**

# *Measuring Occupational Regulation (Westat Survey, 2008)*

**Q11. Do you have a license or certification that is required by a federal, state or local government agency to do your job?**

- YES ..... 1
- NO .....2 (Go to Q25)
- IN PROCESS/WORKING ON IT..... 3

**Q11a. Would someone who does not have a license or certificate be legally allowed to do your job?**

- YES ..... .1
- NO ..... 2

**Q12. Is everyone who does your job eventually required to have a license or certification by a federal, state or local government agency?**

- YES ..... .1
- NO ..... 2

# *Analytical Uses of the Measures of Occupational Licensing*

## **Findings:**

- The requirement of government regulation is associated with higher wages relative to jobs requiring only local licensing.
- Certification has a much smaller effect on wages.
- Wage effects: 12 to 19 percent with observable controls

Source: Morris Kleiner and Alan Krueger, 2013. "Analyzing the Extent and Influence of Occupational Licensing on the Labor Market." *Journal of Labor Economics* 31(2): S173– S202.

## *2013 Harris Survey Used for the State Level Analysis*

**Question 11. Do you have a license or certification that is required by a federal, state or local government agency to do your job?**

YES ..... .1  
NO ..... 2  
IN PROCESS/WORKING ON IT.....3

**Question 11a. Would someone who does not have a license or certificate be legally allowed to do your job?**

YES ..... .1  
NO ..... 2

**Question 12. Is everyone who does your job eventually required to have a license or certification by a federal, state or local government agency?**

YES ..... .1  
NO ..... 2

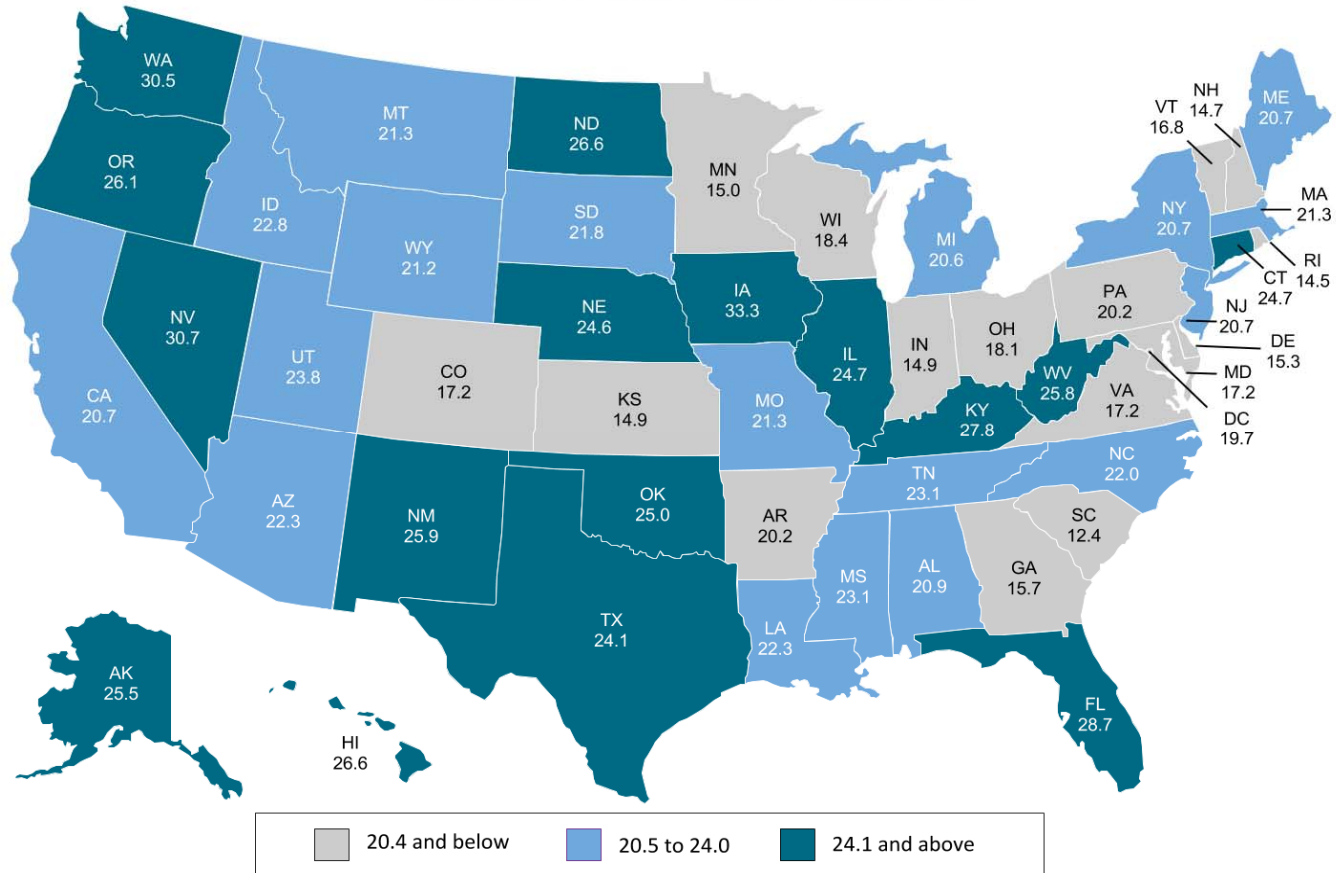
- **Estimated wage effects about 10 percent\***

\*Source: Morris Kleiner and Evgeny Vornotnikov, 2015, "Analyzing Occupational Licensing Among the States", Working Paper, University of Minnesota



# Harris Survey Estimates of Percent Licensed by State

Share of Workforce 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.

# *Survey Completed in each of the 28 Nations of the European Union (2015)*

## **Questions Asked:**

- “In addition to this education, do you have a professional certification, licence or did you have to take an exam which is required to practice your occupation? “
- “Without this professional certification, licence or exam would you be legally allowed to practice your occupation?”
- “Who granted/ gave you or grants/ gives this authorisation?”

## *U.S. Survey Data with Questions on Occupational Regulation*

- Survey of Income and Program Participation (SIPP)
- Current Population Survey (CPS)
- National Survey of College Graduates (NSCG)
- Beginning Postsecondary Students (2016)
- Credentials for Adult Training and Education Survey (2017)

## *SIPP definition of Occupational Regulation*

- The Professional Certifications, Licenses, and Educational Certificates topical module offers data about the most recent license or certification that a respondent earned.
- To begin, all respondents aged 16 and over answered the question
  - ✓ *“Do/Does you/he/she have a professional certification or a state or industry license?”*
- Individuals who had attained a professional certification or license then answered the question
  - ✓ *“Who awarded this certification or license?”*

## *SIPP definition*

- Taking courses or training, demonstrating skills while on the job or passing a test or exam, and taking periodic tests or continuing education classes or earning CEUs (continuing education units).
- **To the extent that informal requirements and legal requirements do not align, this interpretation would not allow researchers to distinguish licensed from certified workers.**

# Using the SIPP to analyze wage effects 8 to 11 %–GKK\*

## Effects of Required Licensing and Certification on Wages

Variable	(1)	(2)	(3)	(4)
<b>Panel A: Definition 1</b>				
Licensed or certified	0.151*** (0.017)	0.016 (0.015)	0.012 (0.013)	0.017 (0.012)
Licensed or certified × Required	0.109*** (0.019)	0.083*** (0.016)	0.088*** (0.015)	0.068*** (0.014)
$R^2$	0.035	0.341	0.442	0.515
$N$	77,190	75,689	75,501	75,501
<b>Panel B: Definition 2</b>				
Licensed	0.114*** (0.022)	-0.024 (0.021)	-0.010 (0.018)	-0.002 (0.016)
Licensed × Required	0.152*** (0.023)	0.117*** (0.021)	0.112*** (0.018)	0.084*** (0.018)
Certified	0.205*** (0.028)	0.070*** (0.023)	0.044** (0.022)	0.045** (0.020)
Certified × Required	0.039 (0.034)	0.049* (0.029)	0.054* (0.028)	0.049* (0.025)
$R^2$	0.035	0.341	0.443	0.515
$N$	76,994	75,497	75,309	75,309
Controls?	N	Y	Y	Y
Occupation fixed effects?	N	N	2-digit	3-digit

Source: Authors' calculation from the 2008 panel of the Survey of Income and Program Participation, Wave 13 Core and Topical Module

\*Gittleman, Maury, Mark A. Klee, and Morris M. Kleiner. 2015. "Analyzing the Labor Market Outcomes of Occupational Licensing." NBER Working Paper No. 20961. Cambridge, MA: National Bureau of Economic Research.

## *Examples for the CPS definition*

- Do you/does [name] have a currently active professional certification or a state or industry license? Do not include business licenses, such as a liquor license or vending license.

Help text: A professional certification or license shows you are qualified to perform a specific job. Examples include a realtor license, a teacher's license, or an IT certification. Only include certifications or licenses obtained by an individual.

## *Examples for the CPS definition*

- Were any of your/his/her certifications or licenses issued by the federal, state, or local government? [Yes; No]
- Earlier you told me you/[name] had a currently active professional certification or a state or industry license. Is your/his/her certification or license required for your/his/her job? [Yes; No; Do not have a currently active certification or license]



## *National Survey of College Graduates- Questions Asked*

- As of February 1, 2015, did you have a currently active professional certification or a state or industry license? [Yes; No]

Help text: A professional certification or license shows you are qualified to perform a specific job. Only include certifications or licenses obtained by an individual. Examples include Certified Teacher, Registered Nurse, Licensed Professional Engineer, things like a Licensed Teacher, Licensed Realtor, Certified Medical Assistant, Certified Construction Manager, or a Project Management Professional.

## *National Survey of College Graduates- Questions Asked*

- Who issued this certification or license? [Federal, state or local government; Professional or trade association (e.g., Pediatric Nursing Certification Board, National Exercise and Sports Trainers Association, CompTIA); Business or company (e.g., Microsoft™, 3M Company™, Xerox®); Other group or association]

# *National Survey of College Graduates- Questions Asked*

- Why do you currently hold this certification or license? [Required by employer; Yes/no]
- How many; any for work; name of most recent; year first issued; subject field (write-in); why have it; need to earn CEUs; costs paid by employer

## *Beginning Postsecondary Students-Questions Asked (2016)*

- Now we'd like to ask you about professional certifications or industry licenses. A professional certification or license shows you are qualified to perform a specific job and includes things like Licensed Realtor, Certified Medical Assistant, Certified Construction Manager, or an IT certification. Do you have a currently active professional certification or a state or industry license? (Do not include business licenses such as a liquor license or vending license.) [Yes; No]

## *Beginning Postsecondary Students*

- Indicate whether you have a professional certification or license of any kind, including those not specifically mentioned in the question. When answering this question, do not consider if your professional certification or license is related to or required by your current or most recent job.
- Is this certification or license required for your job? [Yes; No]

# *Credentials for* Adult Training and Education Survey (2017)

- Do you have a currently active professional certification or a state or industry license? Do not include business licenses, such as a liquor license or vending license.

Help text: A professional certification or license shows you are qualified to perform a specific job and includes things like Licensed Realtor, Certified Medical Assistant, Certified Teacher, or an IT certification.

# *Credentials for Adult Training and Education Survey (2017)*

- Was it issued by the federal, state, or local government? (for example, by a state board of education or other state board, OSHA, or FAA) [Yes; No; Don't know] (for 3)
- ***[For current or most recent job:] Did you have a license that was required by a federal, state, or local government agency to do this job? [Yes; No]***
  - ✓ Closest to the Westat and Harris surveys

## *Can these questions on occupational regulation be asked on the American Community Survey (ACS)?*

### **Benefits:**

- Analyze which policies influence wage determination and income inequality at the state and local level
- Examine which policies at the local or state area have the greatest influence on employment levels and changes
- Examination of policies over time, by occupation and demographic characteristics (i.e., age, race, gender)
- Examination of the determinants of occupational licensing regimes (e.g., political economy analyses)



*New potential data for examining the influence of occupational regulation by government—Administrative data*

- Colorado has tabulated the number of individuals who are licensed in the state by occupation (MSA or County level analysis)
- Use of administrative data as a quality control for survey data
- Use of administrative data to determine which qualifications and schooling are associated with the fewest malpractice law suits, complaints and remedies
  - ✓ ***Quality effects of occupational regulation***
- Federal government could provide incentives for states to gather the data

*New potential data for examining the influence of occupational regulation by government—  
Administrative data*

- Ability to implement longitudinal analysis—track the same individuals over time
- Ability to link via SSN to wage and employment histories via social security and IRS data bases
- ***Unlike the NLSY or ACS these administrative data are the effects of occupational licensing attainment relative to coverage!***

*Illustrations of other data that can be used as examples in establishing occupational regulation information from administrative sources*

- Longitudinal Research Data
- Continuous Work History Sample
- IRS/CWHS links—links of tax records and social security data
- Unemployment Insurance
- Worker Compensation

# References

- Gittleman, Maury, Mark A. Klee, and Morris M. Kleiner. 2015. “Analyzing the Labor Market Outcomes of Occupational Licensing.” NBER Working Paper No. 20961. Cambridge, MA: National Bureau of Economic Research.
- Kleiner, Morris and Alan Krueger “Analyzing the Extent and Influence of Occupational Licensing on the Labor Market.” *Journal of Labor Economics* 31(2): S173– S202.
- Kleiner, Morris and Evgeny Vornotnikov, 2015, Analyzing Occupational Licensing Among the States, Working Paper, University of Minnesota

- **Thank you** for the opportunity to present current and prospective data on occupational regulation
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