

Reforming Occupational Licensing Policies

Morris M. Kleiner



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NOTE: This discussion paper is a proposal from the author(s). As emphasized in The Hamilton Project's original strategy paper, the Project was designed in part to provide a forum for leading thinkers across the nation to put forward innovative and potentially important economic policy ideas that share the Project's broad goals of promoting economic growth, broad-based participation in growth, and economic security. The author(s) are invited to express their own ideas in discussion papers, whether or not the Project's staff or advisory council agrees with the specific proposals. This discussion paper is offered in that spirit.

BROOKINGS

Abstract

Occupational licensing has been among the fastest growing labor market institutions in the United States since World War II. The evidence from the economics literature suggests that licensing has had an important influence on wage determination, benefits, employment, and prices in ways that impose net costs on society with little improvement to service quality, health, and safety. To improve occupational licensing practices, I propose four specific reforms. First, state agencies would make use of cost-benefit analysis to determine whether requests for additional occupational licensing requirements are warranted. Second, the federal government would promote the determination and adoption of best-practice models through financial incentives and better information. Third, state licensing standards would allow workers to move across state lines with a minimal cost for retraining or residency requirements. Fourth, where politically feasible, certain occupations that are licensed would be reclassified to a system of certification or no regulation. If federal, state, and local governments were to undertake these proposals, evidence suggests that employment in these regulated occupations would grow, consumer access to goods and services would expand, and prices would fall.

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Chapter 1. Introduction

Occupational licensure is the process by which governments establish qualifications required to practice a trade or profession, so that only licensed practitioners are allowed by law to receive pay for doing work in the occupation. This form of regulation has rapidly become one of the most significant factors affecting labor markets in the United States and other industrialized countries. In the early 1950s less than 5 percent of U.S. workers were required to have a license from a state government in order to perform their jobs legally. By 2008, the share of workers requiring a license to work was estimated to be almost 29 percent (Kleiner and Krueger 2013). Workers often requiring a license include those with extensive formal education such as physicians, attorneys, nurses, and teachers, as well as those in occupations requiring less formal education such as truck drivers and hair stylists (Gittleman, Klee, and Kleiner 2014). In fact, in the early 1990s the Council of State Governments estimated that about eight hundred occupations were licensed by at least one state (Brinegar and Schmitt 1992).

Given the pervasiveness and growth of occupational licensing, it has become a key issue in workers' access to jobs, and those workers' potential labor market and economic outcomes.

The main rationales for occupational licensing are to protect the health and safety of consumers and to ensure a sufficiently high level of product or service quality. By making would-be practitioners undergo specific training, pass exams, and complete other requirements, according to this rationale, the public is better protected from fraudulent, disreputable, and unqualified service providers. However, not all occupations pose equivalent threats to health and safety. While work by an unskilled electrician could lead to faulty wiring and a fire hazard, it is hard to imagine a similar level of risk from a less skilled interior designer, travel guide, or auctioneer.

Moreover, the degree of occupational licensing varies widely across states, even for the same occupation, and it is not clear why some have more-restrictive requirements for entering the occupation than others. For example, during the 2012–13 legislative sessions at least seven occupations were newly licensed in at least one state, ranging from scrap metal recyclers in Louisiana to body artists in the District of Columbia.¹ On the other hand, during the same period two governors, one

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from Iowa and the other from Indiana, vetoed legislation from their own party's dominated legislature that would have licensed several new occupations. Notably, Governor Mike Pence of Indiana vetoed the licensing of diabetes counselors, anesthesiologist assistants, and dietitians (Pence 2013). In each of these cases, the occupations are licensed in some states but not others. Even if the same occupation is licensed in multiple states, the requirements for licensure can vary among them. Furthermore, sometimes one state's licensing regime restricts the provision of certain services to a specific occupation whereas another state allows the service to be performed by different occupations: for instance, nurse practitioners can prescribe medication in Arizona but not in Alabama (Kleiner et al. 2014).

Nevertheless, by making it more difficult to enter an occupation, licensing can affect employment in licensed occupations, wages of licensed workers, the prices for their services, and worker economic opportunity more broadly. Indeed, economic studies have demonstrated far more cases where occupational licensing has reduced employment and increased prices and wages of licensed workers than where it has improved the quality and safety of services (Kleiner 2013). These studies have shown, for example, that more-difficult requirements to earn a dental license (in the form of the pass rate of the required exam) do not lead to improved dental outcomes of patients but do result in higher prices of basic dental services, likely because the requirements result in fewer dentists (Kleiner and Kudrle 2000).² Similarly, more-stringent licensing of mortgage brokers has no influence on the number of foreclosures, but does lead to higher prices of mortgages, again likely due to fewer providers of the service (Kleiner and Todd 2009).

Other studies have found that occupational licensing improves the employment prospects of licensed workers and can raise their wages by as much as 15 percent and enhance other benefits such as health coverage and pensions (Gittleman, Klee, and Kleiner 2014; Kleiner and Krueger 2013). These benefits are similar to those of unions (Kleiner and Krueger 2013). However, two important distinctions between the effects of unions and the effects of occupational licensing are that union bargaining leads to higher wages by reallocating some of the profit income from shareholders to workers in unionized establishments, and it reduces variations in earnings. In contrast, occupational licensing transfers income from consumers (in the form of higher prices) to licensed

workers (in the form of higher wages), with no apparent impact on reducing variations in earnings (Gittleman, Klee, and Kleiner 2014; Kleiner and Krueger 2013). Commensurately, studies have also shown that licensing reduces employment growth and limits job opportunities, especially for low-income individuals; the additional requirements needed to earn licensure may steer these workers into lower-paying but more-accessible jobs (Carpenter et al. 2012; Kleiner 2006). In fact, standard economic models imply that the restrictions from occupational licensing can result in up to 2.85 million fewer jobs nationwide, with an annual cost to consumers of \$203 billion (Kleiner, Krueger, and Mas 2011).³ In addition, evidence suggests that occupational licensing can result in a loss in overall output of about 0.1 percent of annual consumption expenditures (Kleiner 2006).

Overall, current research shows many cases in which there are limited benefits of occupational regulation for consumers. There is little evidence to show that the licensing of many different occupations has improved the quality of services received by consumers, although in many cases it has increased prices and limited economic output. The goal of this discussion paper is to present proposals to reform occupational licensing policies in the United States that would foster greater opportunities for job growth and economic prosperity, and lower costs for consumers. These proposals focus on developing cost-benefit analysis of occupational licensing, on the federal government providing incentives to the states for regulatory innovation, on reducing barriers to interstate migration, and on suggestions for movements to less-restrictive forms of occupational regulation.

Chapter 2. The Landscape of Occupational Regulation

Throughout much of the nineteenth century there was little occupational licensing in the United States (Langford 2009). In the later part of that century, with greater urbanization and less knowledge about the skills of the growing number of service providers, states began passing occupational licensing statutes for occupations such as physicians, dentists, pharmacists, and attorneys (Kleiner 2006). In 1882 the state of West Virginia passed a law regulating the practice of physicians (§§ 9 and 15, chapter 93, 1882), which certain physicians subsequently challenged. A resulting Supreme Court case, *Dent v. West Virginia* (1889), established the right of states to require licenses for certain occupations, and more broadly established state law as the appropriate venue to deal with protecting the health, welfare, or safety of citizens.⁴ Unlike federal legislation, such as the National Labor Relations Act passed in 1935, which dealt with collective bargaining, *Dent v. West Virginia* gave to the states the police powers to regulate occupations (Gross 1984). This case largely

took away the right for the federal government to preempt state law in the arena of occupational licensing.

After *Dent v. West Virginia* there was a steady increase in the regulation of occupations in the United States, with thirty occupations licensed by 1920, including more than 2,800 statutory provisions in the different states (Greene 1969). At the beginning of the twentieth century, physicians, dentists, and lawyers in most states were required to obtain a license before they could practice. Following World War II the number of licensed occupations continued to expand as more occupations became well organized (Council of State Governments 1952). Much of this growth has come from medical services: about 76 percent of non-physician health-service providers must have a license in order to work (Kleiner et al. 2014). However, despite the rationale for public health and safety, the rise of licensing for the vast majority of licensed occupations has come mainly at the behest of professional

BOX 1.

The Case of Uber and Taxi Driver Licensing

The growth of information technology in recent years, especially mobile devices, has allowed consumers and service providers to connect with each other with increasingly detailed levels of information about each party, in ways that challenge the traditional role of occupational licensing. Users of Uber, an app-based transportation network and taxi company, have the ability to directly contact suppliers of these services and to access information about the driver. Customers and drivers rate each other immediately after a trip; potential customers and drivers can access this information so that their quality can be evaluated. The drivers, who function as independent contractors, are vetted through the company and have private driver's licenses, but, unlike most taxi drivers, Uber does not require them to have a taxi or chauffeur's license through the state, county, or city. Consequently, they do not pay these licensing fees to the government, and Uber is not subject to other regulations of taxis, such as metered fares and guaranteed coverage of certain destinations.

In essence, Uber drivers perform a function very similar to a licensed occupation—taxi driver—but are not themselves commercially licensed; the law to date is murky on the legality of Uber. Many customers seem to enjoy the benefits of competition with conventional taxis, such as the chance of lower prices, and in some cities Uber drivers almost serve as the family chauffeur (Kapp 2014). On the other hand, taxi companies and drivers and government officials have expressed public safety concerns about Uber's lack of regulation, with some cities, including Portland, Oregon, attempting to ban Uber drivers in the city. Moreover, the increased competition among driving services as a result of car-service apps including Uber has led to declining prices for taxi medallions—licenses that many cities require before an individual is allowed to operate a taxi—and a stalling of medallion sales. As an example, New York City's individual taxi medallions have decreased in price by 23 percent between 2013's peak and the beginning of 2015 (Barro 2015).

The fate of Uber and similar services, even as they continue to grow, will likely be determined through court battles and, potentially, legislation.

TABLE 1.

Requirements for Becoming Licensed or Certified

Requirement	Share of licensed workers facing requirement (percent)	Share of certified workers facing requirement (percent)
High school diploma	75.1	66.6
College degree	47.7	28.5
Passing an exam	88.9	85.9
Passing a performance test	67.8	61.1
Continuing education	67.8	52.9
Internship	46.5	35.3
License/certificate renewal test	34.5	33.9

Source: Kleiner and Vortnikov (2015), based on an analysis of data from a Harris poll of 9,850 individuals conducted in the first half of 2013.

Note: Individuals age eighteen or older who were employed or looking for a job were eligible respondents. Kleiner and Vortnikov limited their analysis to individuals who at the time of the survey were either currently employed or had been employed during the previous twelve months.

associations, not consumer advocacy or public interest groups (Kry 2000, 888). Licensing rules brought about in this manner often “grandparent” current practitioners and allow them to practice without their having to meet the new requirements, suggesting that licensing criteria are not imposed solely with the health and safety of consumers in mind. There are some cases where a government entity imposed regulation, usually as a result of perceived corruption. For example, stockbrokers were brought under federal regulation in response to the financial scandals that grew out of the crash of the stock market in 1929 and subsequent depression (Gellhorn 1976).

By 2003 the Council of State Governments estimated that more than 1,100 occupations were licensed, certified, or registered in at least one state (Council on Licensure, Enforcement, and Regulation [CLEAR] 2004). In contrast to occupational licensing, the process of certification permits any person to legally perform the relevant tasks, but the government—or sometimes a private, nonprofit agency—administers an examination and certifies those who have achieved the requisite level of skill and knowledge. For instance, in many states travel agents and car mechanics are certified but not licensed. This process allows for competition for services, as anyone can legally perform the work, but it protects the right of the title for those in the occupation. For example, only workers who have passed through a Chartered Financial Analyst program and exam can use that title, but others can provide financial advice for a fee as long as they do not use the title “chartered financial analyst.” Registration is even less restrictive, and means that workers in an occupation must apply to be on an official roster maintained by a government agency.

It is difficult to ascertain exactly what share of workers are required to have a license (or are certified) to do their jobs,

or how this share varies across states or different periods, since government surveys have not tracked this information. In 2013, however, Harris Poll Interactive conducted such a survey for the Institute for Justice of approximately ten thousand workers (Kleiner and Krueger 2013; Kleiner and Vortnikov 2015; also see the appendix). This poll found that 28.4 percent of the respondents said they were either licensed or certified in their current jobs. Approximately a quarter of this group stated that the work functions in their occupation could be legally performed by individuals without a license (that is, they meet the definition of government certification). Including respondents who said that individuals who worked in their occupation did not require a license currently but would eventually require one raises the total share of workers that are or eventually must be licensed or certified by a government to 30.2 percent.⁵

The Harris poll also asked workers what types of requirements they needed to meet to achieve their license or certification (see table 1). Just over three-quarters of licensed workers reported a high school diploma was necessary, and nearly half said a college degree was necessary. Almost 90 percent reported the need to pass an exam, and many reported necessary continuing education and internships. These requirements are only slightly less demanding for certified, rather than licensed, workers.

The share of the workforce that is licensed or certified varies considerably across states, as shown in table 2. The table reports state-level estimates of occupational licensing and certification, using data from the same Harris poll. Iowa (33.3%) leads the country as the state with the highest share of its workforce licensed, while South Carolina (12.4%), Rhode Island (14.5%), New Hampshire (14.7%), and Indiana (14.9%)

TABLE 2.

Share of Workforce Licensed or Certified, by State

State	Share of workforce licensed (percent)	Share of workforce certified (percent)	State	Share of workforce licensed (percent)	Share of workforce certified (percent)
Alabama	20.9	6.9	Montana	21.3	8.3
Alaska	25.5	7.3	Nebraska	24.6	8.3
Arizona	22.3	8.7	Nevada	30.7	5.4
Arkansas	20.2	5.3	New Hampshire	14.7	4.1
California	20.7	6.1	New Jersey	20.7	11.3
Colorado	17.2	7.4	New Mexico	25.9	7.3
Connecticut	24.7	8.8	New York	20.7	5.5
Delaware	15.3	3.5	North Carolina	22.0	8.4
District of Columbia	19.7	6.9	North Dakota	26.6	2.6
Florida	28.7	4.2	Ohio	18.1	7.5
Georgia	15.7	5.9	Oklahoma	25.0	7.2
Hawaii	26.6	11.3	Oregon	26.1	3.8
Idaho	22.8	8.4	Pennsylvania	20.2	7.6
Illinois	24.7	5.0	Rhode Island	14.5	11.9
Indiana	14.9	10.8	South Carolina	12.4	3.5
Iowa	33.3	5.1	South Dakota	21.8	5.6
Kansas	14.9	5.6	Tennessee	23.1	4.2
Kentucky	27.8	10.7	Texas	24.1	3.7
Louisiana	22.3	9.9	Utah	23.8	5.9
Maine	20.7	7.8	Vermont	16.8	6.5
Maryland	17.2	4.8	Virginia	17.2	3.7
Massachusetts	21.3	3.9	Washington	30.5	7.2
Michigan	20.6	3.3	West Virginia	25.8	12.3
Minnesota	15.0	3.4	Wisconsin	18.4	1.9
Mississippi	23.1	7.2	Wyoming	21.2	10.1
Missouri	21.3	5.4			

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 (Harris Poll Interactive 2013).

Note: Individuals age eighteen or older who were employed or looking for a job were eligible respondents. Kleiner and Vorotnikov limited their analysis to individuals who at the time of the survey were either currently employed or had been employed during the previous twelve months.

TABLE 3.

Number of States that License Lower-Income Occupations, by Select Occupations

Occupations with Highest Number of States Requiring a License		Occupations with Lowest Number of States Requiring a License	
Occupation	Number of States that License	Occupation	Number of States that License
Pest Control Applicator	51	Dental Assistant	7
Emergency Medical Technician	51	Tree Trimmer	7
School Bus Driver	51	Upholsterer	7
Bus Driver (City/Transit)	51	Social and Human Service Assistant	7
Vegetation Pesticide Handler	51	Packager	7
Truck Driver	51	Sheet Metal Contractor (Residential)	7
Cosmetologist	51	Title Examiner	6
Skin Care Specialist	50	HVAC Contractor (Residential)	5
Manicurist	50	Shampooer	5
Barber	50	Psychiatric Technician	4
Preschool Teacher	49	Interior Designer	4
Earth Driller	47	Cross-connection Survey Inspector	4
Athletic Trainer	46	Court Clerk	4
Fisher	41	Home Entertainment Installer	3
General/Commercial HVAC Contractor	40	Dietetic Technician	3
Massage Therapist	39	Electrical Helper	2
Mobile Home Installer	39	Nursery Worker	2
Veterinary Technologist	37	Log Scaler	2
Security Guard	37	Psychiatric Aide	2
Make-up Artist	36	Still Machine Setter	2
Door Repair Contractor	35	Pipelayer Non-contractor	1
Security Alarm Installer	34	Conveyor Operator	1
Fire Alarm Installer	34	Florist	1
Milk Sampler	34	Fire Sprinkler System Tester	1
Child Care Worker	33	Forest Worker	1
Auctioneer	33		

Source: Institute for Justice (2012).

Note: Lower-income occupations refer to occupations whose average income fell below the national average income.

are the states with the smallest shares of their workforce licensed. West Virginia (12.3%) and Rhode Island (11.9%) have the highest percentage of certified workers. In contrast, Wisconsin (1.9%) and North Dakota (2.6%) have the lowest percentage of certified workers.

Because the use of occupational licensing varies across states for the same occupation, the large variations in licensing requirements suggest that this form of regulation is not always strictly related with safety or quality concerns over individuals' ability to do the tasks related to the occupation (Carpenter et al. 2012). For example, only seven states license dental assistants and thirteen states license locksmiths. Even for states that do license the same occupation, the requirements to obtain a license can vary widely. Iowa requires 490 days of education and training to become a licensed cosmetologist, but the national average is 372 days, and New York and Massachusetts require only 233 days (Carpenter et al. 2012). Training requirements also are frequently unrelated to issues of health and public safety. To illustrate, training requirements

in Michigan take 1,460 days for an athletic trainer, but only twenty-six days for an emergency medical technician. These examples provide some illustrations of the variance in the training required of licensed workers across states and the licensing of occupations within states. Table 3 lists some of the lower-income occupations that are most and least frequently licensed.

Although these differences in occupational regulation across states may in part reflect differing mixes of industry and human capital characteristics, they may also reflect the ability of occupational associations to lobby successfully for licensing requirements in order to limit competition for their workers. In a rational occupational licensing system, for example, it is difficult to justify why Iowa would have twice the percentage of licensed workers as South Carolina, Rhode Island, New Hampshire, or Indiana. As discussed in the following section, these differences are rarely related to service quality or public safety, but they do have important implications for worker opportunity, prices, and access to these services.

Chapter 3. The Challenge

Although originally motivated by concerns over public health and safety, the regulation of many occupations often can limit worker opportunity more than it protects consumers. Economic studies have found little impact of occupational licensing on service quality in occupations that are not widely licensed; even in occupations that are widely licensed, studies have found few impacts of tougher requirements for licensing on health measures or quality outcomes. In contrast, many of the same studies have found occupational licensing to affect wages, employment, and benefits (Gittleman, Klee, and Kleiner 2014; Kleiner and Krueger 2010, 2013; Kleiner and Todd 2009). Most of the literature has shown that licensing is beneficial for those fortunate enough or able to obtain a license, and that these benefits come mainly at the expense of consumers, who are confronted with reduced availability of services and higher prices (Cox and Foster 1990; Kleiner 2006). Policy makers need to examine and determine whether these increases in economic status to licensed workers are a result of increased quality caused by greater training that result in higher-quality services, or whether they are a result of restricted competition through the limiting of entry into the occupations, or both.

INFLUENCE OF OCCUPATIONAL LICENSING ON QUALITY OF SERVICES

Many research studies have attempted to develop methods of estimating the influence of licensing on quality or the demand for licensed services. On this issue there are a disproportionate number of studies on regulation in dentistry. In part this is because for many years dentistry had large variations in state licensing requirements and unique state-specific requirements: an example is the gold foil procedure for filling teeth that was required in California, but in no other state (Kleiner 2006). Moreover, it was easy to identify and quantify outcome measures such as the number of cavities. While an early study (Holen 1978) found that stricter licensing reduced the likelihood of adverse outcomes, such as number of cavities, or broken or chipped teeth, more-recent studies that control for additional economic, demographic, and statutory factors for the individuals and states represented find no impact of tougher state licensing laws and administrative procedures on measures of dental condition (Carroll and Gaston 1981; Kleiner and Kudrle 2000). This finding suggests that stricter

occupational licensing in dentistry—based on observed differences across states—generally has little to no effect on outcomes, even when outcomes are measured directly at the point of service. Among other health-care occupations, evidence of positive quality impacts from occupational regulation has been similarly scant. An early field study conducted by the Federal Trade Commission (FTC) on optical care found that the average quality of eye care examinations is lower in regions with restrictions on the advertising of optometry services (Kwoka 1984). In addition, the price of these eye exams was found to be lower when advertising was permitted.

It is difficult to demonstrate quality impacts in non-health-related occupations. In another early field study, the FTC examined the relationship between licensing and service quality for television repair (Phelan 1974). In this study, researchers used televisions with known defects to measure the quality of repair services in three locations: Washington, DC, which had no licensing of TV repair; New Orleans, which licensed the individual worker; and San Francisco, which licensed the facility but not the individual. One of the findings was that the licensing of individuals in Louisiana (the Louisiana Licensing Law) did not protect the consumer from parts fraud (the use of substandard repair parts). Researchers found parts fraud in about 20 percent of the repair attempts in San Francisco, compared to about 50 percent in both New Orleans and Washington, DC.

Rigorous studies of other occupations, from construction contractors to florists to teachers, suggest that tougher forms of regulation have ambiguous effects at best on the quality or the demand for the service. In the case of building contractors, for example, allowing lower-quality contractors to obtain licenses tends to reduce the quality-enhancing impacts of licensure (Maurizi 1980), which would suggest licensing can modestly improve quality in some circumstances. On the other hand, a field experiment found that licensed florists in Louisiana (the only state to license florists) did not produce better-quality floral arrangements than their unlicensed counterparts in Texas. However, the floral arrangements in Louisiana cost more for the same product and service than those in Texas (Carpenter 2011). With regard to teachers, especially rigorous studies have found the growth of occupational licensing in

that occupation over the past two decades has not measurably affected most students' test scores, which are a generally recognized (if imperfect) indicator of quality in education (Angrist and Guryan 2003; Kleiner and Petree 1988). A subsequent study was more nuanced, showing that in wealthier school districts stricter teacher licensing was associated with higher scores on standardized tests; however, in lower-income districts the degree of teacher licensing did not appear to be related to student test scores at all (Larsen 2012). Earlier studies covering a range of widely varying but professional licensed occupations found that licensing had either a negative impact or no influence on the quality of services received by consumers (Carroll and Gaston 1981). Collectively, these studies indicate that occupational licensing as it is commonly practiced may not improve consumer protection.

Overall, few studies have shown significant benefits of occupational regulation on the quality of service received by consumers or on the demand for the service. Although policy makers may wish occupational licensing were a way to enhance quality, there is little evidence to support this assumption for consumers, even at the point of sale. On the other hand, several studies have found significant effects on the wages that licensed practitioners receive and on the prices that consumers face.

INFLUENCE OF OCCUPATIONAL LICENSING ON WAGES AND EMPLOYMENT

According to recent research, working in a universally licensed occupation appears to increase hourly earnings by between 10 to 15 percent relative to unlicensed individuals with similar education and skills; this magnitude is only slightly smaller than that of other labor market institutions such as unions (Gittleman, Klee, and Kleiner 2014; Kleiner and Krueger 2010, 2013). For individuals working in an occupation that is licensed in some states and not in others, the impact of being licensed is much smaller, about 5 to 8 percent (Gittleman, Klee, and Kleiner 2014; Gittleman and Kleiner 2014; Kleiner 2006).

These studies also find that the wage benefits of licensing are concentrated primarily among individuals who are already in relatively well-paying occupations (Gittleman, Klee, and Kleiner 2014). For occupations associated with both higher education and higher income and that are mainly in the

private sector, such as physicians, dentists, and attorneys, licensing appears to have large effects by limiting entry or making it more difficult for an individual to be hired for a job in another state. However, for other occupations, including teachers, nurses, and cosmetologists, the impact of licensing on earnings is murky, with some studies finding small effects and others finding none (Kleiner 2006, 2013). The influence of occupational licensing on employment growth takes place more gradually, but research findings suggest that states that license a certain occupation experience slower employment

Evidence suggests that relicensing policies impose costs on workers looking for jobs they want in another state, reducing their ability to earn a living.

growth in that occupation relative to the same occupation in states that do not require a license (Kleiner 2006). To see how occupational licensing can lead to slower employment growth in the long term, consider the following: States often enact grandparent clauses that protect existing workers, and new entrants must have higher entry standards than existing members of the occupation. The process of older, less-educated workers leaving, and newer workers with higher entry requirements entering takes time to work its way through the labor market. This process may limit the supply of labor and allow those currently in the occupation to gain economic benefits by limiting employment growth.

INFLUENCE OF OCCUPATIONAL LICENSING ON GEOGRAPHIC MOBILITY

Although occupational licensing may effectively boost wages for some occupations, licensed workers are not always better off. Both theory and empirical evidence indicate that licensing can hamper mobility, making it harder for workers to take advantage of job opportunities in other states. Occupational licensing can act as a deterrent to geographical movements in

BOX 2.

Comparisons and Lessons from the European Union

Occupational licensing is not unique to the United States. Based on information gathered in 2012 from the then twenty-seven nations in the European Union (EU), between 9 and 24 percent of European workers are subject to occupational licensing, which translates to between 19 million and 51 million individuals. These estimates of the share of the workforce that is licensed, even at the higher end, are still lower than the estimated share in the United States, which is slightly under 30 percent (Koumenta et al. 2014).

Similar to U.S. states, the extent of occupational licensing varies widely across countries in the EU: Bulgaria, Estonia, Finland, France, Ireland, Latvia, Lithuania, Malta, the Netherlands, Romania, and Sweden all have less than 15 percent of their workers covered by occupational licensing (Koumenta et al. 2014). Regulation is much more prevalent in other countries, however: at least 25 percent of the workforce in Denmark and Germany, for example, is regulated, and rates are also high in Italy and Spain.

In an effort to promote job growth, Poland's government in October 2011 presented an ambitious agenda of deregulating access to many of the nation's professions. The country is currently in this process, and by the end of 2015 the government plans to have liberalized access to about 250 of the 380 currently regulated professions (Kleiner and Lachowska 2014). The prime minister's office (Prime Minister's Office [Poland] 2012) has stated that liberalizing access is expected to have the following consequences:

1. There will be higher employment due to the removal of barriers to entering the regulated professions. In fact, the prime minister's office has stated, "According to expert estimates, deregulation may increase employment within the [occupations] concerned by 15–20 percent" (Poland Prime Minister's Office 2012).
2. There will be lower prices and better quality of services in the sectors that deregulate access to professions.
3. Administrative costs will be lower than the costs of maintaining the current regulatory system.

several ways. For instance, because licensing is typically done at the state level, the worker often must repeat many of the requirements and investments necessary to gain licensure in another state. These requirements sometimes involve meeting qualification criteria such as having good moral character, passing exams, working with or for local practitioners, and in many cases engaging in continuing professional development activities (an investment that continues throughout the worker's career). In the absence of reciprocity agreements—in which one state accepts an occupational license granted by a partner state—relicensure requirements can be prohibitive, in terms of both time and money, and so discourage workers from moving to a different state.

More generally, evidence suggests that relicensing policies impose costs on workers looking for jobs they want in another state, reducing their ability to earn a living. This has become a particularly important issue for military families who are often moved across state lines. The situation arises when trailing partners, if they are licensed in one state, have to seek reaccreditation in a second state at considerable cost in both time and money. This phenomenon was recently highlighted in a report by the U.S. Executive Office of the President (2013).

Several studies have corroborated the negative link between occupational licensing and worker mobility. Some of this literature is from the 1960s, 1970s, and 1980s and focuses on the occupations then heavily licensed, such as dentists, physicians, and attorneys (Holen 1965; Kleiner, Gay, and Greene 1982; Pashigian 1979). However, evidence that is more recent confirms and extends the earlier findings to lower-earning occupations. For example, licensing for attorneys still affects their cross-state migration rates and earnings (Tenn 2001). The regulation of manicurists, who are commonly licensed although associated requirements are variable in different states, can impede cross-state and even international migration—particularly of manicurists from Vietnam. (Forty-two percent of all manicurists in the United States in 2000 were Vietnamese.) In particular, a well-regarded study finds that the requirement of an additional one hundred hours of training reduces the likelihood of having a Vietnamese manicurist in the area by 4.5 percentage points, while the requirement of some level of English proficiency reduces that likelihood by 5.7 percentage points (Federman, Harrington, and Krynski 2006). In other words, policies that affect migration are not limited to high-income individuals.

This lack of mobility not only can have detrimental effects on workers, but also can harm consumers—especially in rapidly growing areas. To the extent that licensing slows both the influx of new workers and greater competition, consumers are not able to take advantage of services at the lowest cost (Moretti 2012). Taken together, these studies support the view that regulation may limit the number of practitioners and that a policy of reducing barriers to migration could provide benefits to workers and consumers.

INFLUENCE OF OCCUPATIONAL LICENSING ON PRICES

Occupational licensing can affect prices through several channels, from restrictions on interstate mobility of workers to limitations on advertising and other commercial practices (Bond et al. 1980; Feldman and Begun 1978; Shepard 1978). The impact on prices of licensing-related practices ranges from 5 to 33 percent, depending on the type of occupational practice and location (Kleiner 2006).⁶ For example, the influence of the lack of reciprocity in dentistry raises prices by 15 percent (Shepard 1978). A restriction on the number of hygienists that a dentist may employ increases the average price of a dental visit by 7 percent (Liang and Ogur 1987). Restrictions on the tasks a nurse practitioner can provide without the supervision of a physician raises prices of well-child exams by 10 percent, with no effect on child mortality or insurance rates for malpractice (Kleiner et al. 2014).

These higher prices could be the result of government regulations reducing the likelihood of poor service, or lemons, in the market (Akerlof 1970). The rationale is that higher prices cause the consumers to perceive the service to be of higher quality (even if this is not actually the case) and demand more

of the service, which drives up the price. On the other hand, regulations could be a way for current practitioners to raise their own wages by limiting entry or restricting information on prices in the market for the service (health care is a prime example of such use of regulations) (Friedman 1962; Kleiner 2014). Under this framework, occupational licensing functions as if the government were granting a monopoly in the market for the service, with the long-term impacts being lower-quality services, too few providers, and higher prices. It is difficult to tell from the empirical studies of licensing which of these causes is more likely. However, regardless of the exact cause, it is possible for regulated high-income occupations, such as dentists and attorneys, to raise prices in a way that may further shift income from lower-income customers to higher-income practitioners, possibly contributing to greater income inequality. In particular, if wealthier consumers place greater value (or can afford) the higher quality brought by licensure, then lower-income individuals with less demand (or less ability to pay) for higher quality might lose from tougher licensing standards by having less access to the service and at a higher price (Kleiner and Kudrle 2000; Shapiro 1986).

An alternative explanation for these price increases that the occupations' professional associations often give is that the method of delivering services for the profession has changed over time, and that allowing a group of experts to supervise, govern, and recommend changes would standardize the practices and reduce uncertainty in the minds of consumers. For example, by having better dentists through more training, the patient is likely to receive better care, but at a higher price. Furthermore, capital expenditures in the form of more-sophisticated and more-expensive equipment have increased the required return on investment both for sole practitioners

BOX 3.

The Case of Dentists vs. Teeth Whiteners

In the Supreme Court case *North Carolina State Board of Dental Examiners v. Federal Trade Commission*, argued in October 2014, the dental licensing board of North Carolina claimed that individuals who were not dentists who sold over-the-counter tooth whitening kits in malls and salons were practicing dentistry without an occupational license.⁷ When the dental board sent cease-and-desist letters to these teeth whitening service providers and distributors of teeth whitening products and equipment, the FTC viewed the board's action as a violation of the Sherman Antitrust Act. During the oral arguments at the Supreme Court, Associate Justice Breyer expressed concern about bureaucrats making decisions in areas where only trained professionals are knowledgeable and have competence in making appropriate decisions (Liptak 2014). Although a regulatory board consisting of licensed practitioners possesses specific knowledge of the tasks needed to perform the job, such a board can lead to perverse incentives in which the interests of the practitioners are in conflict with the interests of the public. In North Carolina six of the eight board members were practicing dentists elected by other practicing dentists, and were not chosen by the governor, legislature, or other officials responsible to the public. While the dentists have an interest in exclusively reserving the right to sell a profitable service, the public has an interest in there being a sufficient number of individuals to do the job at a reasonable price and at an acceptable quality. This Supreme Court case, whose decision is pending as of this writing, provides an illustration of how occupational regulation can lead to conflicts over who can legally provide services to the public.

TABLE 4.

A Comparison of Licensing Practices for Dental Occupations in North Carolina and Colorado

North Carolina	Colorado
The profession and one public member elect members of the licensing board.	The governor selects members of the licensing board.
Professional members of the board investigate misconduct and the authority to perform specific tasks.	Independent investigators investigate misconduct and the authority to perform specific tasks.
The state's attorney general does not represent the board.	The state's attorney general represents the board.
Board actions are not necessarily guided by evidence gathered and analyzed by a regulatory agency.	Board actions are guided by evidence gathered and analyzed by a regulatory agency.

Source: Data provided by Lauren Larson, Director, Division of Professions and Occupations, Department of Regulatory Agencies (DORA), State of Colorado; data provided via email on January 2, 2015.

and for large-scale providers of medical services (Cutler and Berndt 2001). On the other hand, standardization through occupational licensing may also stifle innovation by not allowing the introduction of new procedures or competitors because they do not accord with standard procedures established by a licensing board. Some have argued, for example, that chief executive officers or members of the board of directors of large corporations should be licensed (Freeman 2008). Although this could in some cases reduce problems related to ethical behavior or enhance skills, it could also reduce innovation by fencing out entrepreneurial individuals who do not have extensive formal education. Neither Bill Gates nor Steve Jobs, for instance, graduated from college and so would not be eligible for licensing of executives under proposed educational requirements, but they nonetheless enhanced innovation, creativity, and the quality of information technology through their technical and managerial skills. They also greatly enhanced access to numerous consumer products.

THE NET EFFECTS OF OCCUPATIONAL LICENSING

With little published research on the relationship between performance on an occupational licensing exam and an individual's ability to perform the job safely at a high-quality level, there is no assurance that the quality of services received by consumers necessarily improves when government places additional requirements on the providers of those services.

Yet these requirements can be costly: even for occupations with fewer education requirements, such as cosmetology, job-specific training can take longer than one year and include an apprenticeship followed by a state licensing exam. These requirements may result in fewer practitioners, especially in lower-income occupations, and higher prices, thereby resulting in reduced access to the services. The net effects can be regressive, as lower-income consumers—who now have to pay higher prices and may have less access to services ranging from haircuts to dental exams—pay more to the regulated practitioners, some of whom are well compensated.

The economic costs of occupational licensing have generated calls, from both sides of the political spectrum, to rethink the system. In 2014 the Republican chairperson and the Democratic ranking member of a House subcommittee agreed that occupational licensing deserves greater scrutiny (Vinik 2014). Moreover, as table 4 shows, states like North Carolina and Colorado have varying policies on implementing occupational licensing practices within their states, which may lead to different outcomes for practitioners and consumers. Given this situation, I put forth a set of proposals with the goal of systematizing and harmonizing occupational regulation in order to promote lower consumer prices, better access to services, and growth in employment, while minimizing harm to public health and to the economic well-being of certain regulated workers.

Chapter 4. The Proposal

Given the costs of occupational licensing to the economy and the inconsistency and variability of licensing across states, I am proposing four policy changes that would both reduce the regulatory costs of occupational licensing among the states and enhance employment and the services provided to consumers.

1. State agencies would make use of cost-benefit analysis to determine whether requests for additional occupational licensing requirements are warranted.
2. The federal government would promote the determination and adoption of best-practice models through financial incentives and better information.
3. State licensing standards would allow individuals to move across state lines with minimal costs for retraining or residency requirements.
4. Certain occupations that are licensed would be reclassified to a system of certification or to no regulation.

1. COST-BENEFIT ANALYSIS TO EVALUATE OCCUPATIONAL LICENSING

State and local governments should require and perform cost-benefit analysis prior to approving any new occupational licensing requirements or the initial licensing of new occupations. The burden should be on the government together with the associations representing the occupation to demonstrate that the social benefits of these requirements exceed the economic costs. If the benefits to the public exceed the costs, governments and professional associations should also demonstrate that the proposed regulations are the least restrictive means of furthering the goals of the regulations.

As part of the qualitative cost-benefit analysis, state and local governments should also develop and execute a plan to evaluate existing occupational licensing requirements. This plan would include development or inclusion of commissions within their respective regulatory departments (or in the legislative auditor's office) to systematically review state occupational licensing practices. An example of a high-functioning regulatory department that often evaluates occupational licensing is the Colorado Department of Regulatory Agencies

(DORA). Founded in 1968, this nonpartisan department is responsible for conducting sunset reviews required by law that periodically evaluate the need for certain functions of government, including occupational regulation.⁸ In 1985 DORA also became responsible for conducting sunrise reviews on all proposals to regulate previously unregulated occupations or professions. According to Lauren Larson, an official at DORA, the focus of the department is on “eliminating regulatory burden that does not add value for consumer protection.”⁹ With a 2012–13 fiscal year budget of about \$23 million, DORA’s Division of Professions and Occupations plans to return funds to the state in fiscal year 2015, as the fees they collect exceed the costs of the agency.¹⁰ In part due to this scrutiny and cost-benefit analysis, as shown in table 2, Colorado ranks in the lowest quartile of states in the percentage of its workforce subject to occupational licensing (17.2%).

When an occupational group seeks new licensing or a change in licensing requirements, or when a regulatory commission conducts a review of existing licenses, the governing state body should conduct a rigorous analysis to determine whether licensing (or additional licensing) is justified. The inputs into that analysis could come from existing studies—if they exist and are deemed to be rigorous—or from new analyses. I propose a set of questions that state agencies and the representatives of those occupations should consider and address in any such analysis, along with guidelines for evaluating the answers to the posed questions:

1. Are the current standards for occupational practice inadequate to protect the public?

Evaluation: If the regulatory commission finds the current standards to be adequate, then there is no need for further occupational regulation in the form of licensing. If the regulatory commission finds the current standards to be inadequate, advocates for the licensing of that occupation should specify the minimum requirements they think are appropriate for entry into the occupation, whether there is a state or national exam that should form the basis of entry, and whether the occupation should be affiliated with an association that would enact and enforce standards. In addition, the regulatory commission should determine

whether sufficient methods exist for dealing with unqualified practitioners within the occupation that may cause harm to the public. If the answer is found that sufficient methods do not exist, then advocates should convincingly explain to state agencies how and why additional licensing is preferable to enforcement of practitioner compliance through traditional judiciary procedures.

2. Are there current state or local business, nonprofit, or industry institutions that can adequately protect consumers or clients?

Evaluation: If there are institutional arrangements through business associations and industry groups such as the Better Business Bureau, American Arbitration Association, or American Hospital Association that can deal with consumer complaints adequately, then there is no need for government remedies.

3. Why are the existing legal remedies inadequate to prevent or redress the kinds of harm that could result from no licensing? Can litigation through the state and local courts handle any potential issues such as harm to third parties that incompetent or unqualified practices might cause? Would spillovers from lack of regulation cause harm to the community? How can regulation be provided through an existing state agency or in conjunction with presently regulated practitioners without new legislation?

Evaluation: If current legal remedies are adequate, then there is no need for further occupational licensing. If the courts are crowded due to claims of fraud or incompetence against currently unlicensed individuals in the occupation, it is unclear that licensing would reduce court crowding, as courts currently adjudicate cases between licensed occupations. As discussed in box 3, one such case has reached the U.S. Supreme Court: *North Carolina State Board of Dental Examiners v. Federal Trade Commission*.

4. What is the expected impact of the proposed licensing on the existing supply of practitioners? What percentage of current practitioners will be able to meet the proposed eligibility criteria? Will current practitioners be grandfathered (allowed to work without meeting the new requirements), and if so, under what conditions?

Evaluation: If the supply of practitioners is expected to decline and to result in underserved communities or reduced access to the service for those in poverty, then licensing should not be approved unless health and safety issues dominate. Regulation that grandparent current practitioners is tantamount to acknowledging the absence of any significant health and safety issue because these previously unregulated individuals were apparently providing adequate services that did not harm the public.

5. To what extent will regulation or expansion of regulation increase the cost of goods or services provided by practitioners? If applicable, will members of the occupation have bonds posted for coverage of potential legal claims?

Evaluation: If the cost of services is expected to rise substantially, then any health and safety benefits arising from licensing should be balanced against the fewer services that will be provided to the public. If bonds are posted for licensed individuals, as in the case of mortgage brokers, the regulatory commission should present to the state legislature their likely impact on prices and on access to the service (Kleiner and Todd 2009).

These questions should be posed by legislators; appropriate state agencies and the representatives of those occupations seeking to be licensed should do the analysis. If state and local governments were to undertake these proposals and if these proposals were likely to lead to reduced occupational licensing, available evidence suggests that employment in these occupations would grow and the wage premium from restricting competition would fall. The main fiscal cost on states would be from the loss of license fees for occupations that have been deregulated. However, fees from both occupational and business licenses are less than 2 percent of state revenues, on average, ranging from 3 percent in California, a heavy regulation state, to less than 1 percent in Kansas, one of the least regulated states (U.S. Census Bureau 2013). Federal Race to the Top dollars (see subsection 4.2), combined with higher income and payroll taxes due to higher employment and additional transactions, can partially or wholly replace the lost revenue stream.

2. FEDERAL GOVERNMENT TO PROMOTE BEST PRACTICES

While there are occupational licensing requirements at the federal level, it is state and local rules that have the broadest reach by far. Nevertheless, it might be difficult, either financially or administratively, for states to undertake cost-benefit analyses on their own. I therefore propose that the federal government establish an intergovernmental, interagency working group to evaluate and promote sound policies on occupational licensing. This working group would be similar to how the National Center for Education Statistics' Interagency Working Group on Expanded Measures of Enrollment and Attainment sets out guidelines for state education and training measures.¹¹ (This intergovernmental group has been instrumental recently in adding questions about occupational regulation to major government surveys, such as the Survey of Income and Program Participation and the Current Population Survey; these questions have been used in many of the studies noted earlier.)

The proposed working group would have two primary tasks, combining moral suasion and financial incentives. First, it would develop and promote a set of best practices for many regulated occupations after reviewing existing studies and experiences across states. The group would also be responsible for updating this set of best practices as states begin and continue conducting rigorous cost-benefit analyses of their licensed occupations (see subsection 4.1). The federal government would encourage—but not mandate—states to adopt these particular types of occupational regulatory policies. Only states that want to reform their policies would comply; states that think they would benefit from licensing reform would have the greatest incentives to improve their policies.

The second mission of the working group would be to induce states to adopt the best-practice recommendations by encouraging states (or groups of states willing to cooperate) to compete for federal grants. Under this plan, states would be encouraged to submit proposals that outline specific steps they would take to reduce or modify unnecessary licenses or to revise licenses in specific occupations (e.g., dental hygiene, interior design, and cosmetology). This plan would also encourage states to undertake broader process reforms to include more nonpractitioners on licensing boards. Such reforms could include movement of occupations from governmental licensing to certification or to opening the regulatory process to additional stakeholders, including organized consumer groups such as AARP or the Consumers Union. A panel of experts in the topic, drawn from the intergovernmental, interagency working group described previously or those such a group designates, would review the plans and distribute a partial award to the groups with the most meritorious plans, withholding the remaining award until those groups have met certain progress benchmarks. It is important to note that the plan would not be a mandate and that only states that want to reform their policies would apply for the federal grants.

I propose that the Departments of Labor and Commerce take the lead in establishing the aforementioned working group. To ensure a variety of expertise in determining the set of best practices and evaluating proposals, however, I advocate the following agencies be included in this working group:

- Because of their expertise in data analysis and policy, members of the Census Bureau and the Bureau of Labor Statistics (and perhaps their parent agencies, the Department of Commerce and the Department of Labor) could provide critiques of the methodology of the proposals.
- The Department of Education could assist with determining the criteria in evaluating the state plans, since that agency has expertise from the Race to the Top project.
- Individuals from the National Center for Science and Engineering Statistics (part of the National Science Foundation) and the Office of Statistical and Science Policy (part of the Office of Management and Budget) could provide input regarding the impact of the proposals on licensing of engineers and of health professionals as well as on national innovation and technological change.
- Given their expertise in regulation and consumer protection, experts from the FTC could help the group select high-quality proposals.
- Other groups and their cooperating partners, such as nonprofits from Common Cause or other nongovernmental consumer-oriented groups or universities, could offer comments and advice, as well as help evaluate and promote policies on occupational regulation to the state and local governments.
- Groups including state- and local-level representatives, such as the National Conference of State Legislatures and the National Governors Association, could play a role in developing the set of best practices by highlighting states' experiences.¹² These groups could help facilitate cooperation if two or more states were to want to collaborate, either on their own terms or by applying for a federal grant together, on occupational licensing reform.

The creation of the group could occur either through Executive Order or through interagency cooperation. However, the financing for the federal grant process would be subject to congressional approval. Finally, information about the federal plan, both for promoting a set of best practices and for distributing grants, could be disseminated through a combination of government reports, popular press, and news items through social media. State- and local-level representatives in the working group could also help raise awareness and promote the set of best practices and federal grant process.

Because these state proposals and reforms would not impose a substantial fiscal burden on states, the incentives do not have to be large, say \$10 million per state, to have an effect on state take-up. The incentives from the Department of Education's successful Race to the Top fund were \$4.3 billion, which is smaller than even conservative estimates of the economic costs of licensing. The monetary incentives would be scalable, but importantly every dollar spent on those incentives is likely to generate more than a dollar in new economic activity: the plan will more than pay for itself.

3. STATE RECIPROCITY

When licensing is deemed to be in the public interest, weighed against the economic costs, states and localities should accept, as much as possible, licenses granted by other states. As noted earlier, since most occupations are licensed at the state level, licensure adds a potential barrier to migration across states for those in licensed professions because an individual must often fulfill new licensing requirements when migrating across state lines.¹³ However, licensing laws change often. In particular, state policies to accept licenses earned in other states (known as endorsement) and on forming agreements with other states on establishing mutually agreed licensing requirements (known as reciprocity) are constantly being amended. The Nurse Licensure Compact is one example: all states party to the Compact have agreed to accept nursing licensure applicants from the other party states without additional requirements. In the case of endorsement, a state will accept out-of-state applicants as long as the origin state has substantially equivalent licensure standards as the destination state. Licensed workers living in states that have reciprocity and/or endorsement policies with other states for their particular occupations have lower potential barriers to move to states in pursuit of a job than licensed workers living in states without such reciprocity policies. Indeed, recent empirical evidence on interstate migration shows that reciprocity provisions for occupations that are licensed do have important effects on whether individuals move across state lines (Johnson and Kleiner 2014).

Increased recognition of licenses across states would encourage workers to move to states where jobs are most plentiful and would be a net policy benefit for regulated workers and the consumers of their services. Of course, to the extent to which educational and other regulation-related requirements are harmonized, individuals would more readily move to take advantage of economic opportunities and wage differentials across states (Moretti 2012). This proposal could also help offset the long-standing decline in cross-state migration (Kaplan and Schulhofer-Wohl 2012). Nationwide endorsement through policies that do not limit entry requirements could alleviate uneven geographic distribution of licensed practitioners and ease possible location-specific mismatches (for example, the dearth of certain health-care practitioners in rural states). Targeting even just the ten states with the most mobility between them would go a long way toward solving the problem.¹⁴ More generally, expanding endorsement could greatly assist the economy by reducing structural unemployment and allowing licensed workers to maximize their incomes and productivity.

Encouraging states to accept each other's licensed workers seems to be a simple procedure. States already universally accept other states' driver's licenses despite differences in

requirements and road conditions among states. In that same spirit, states should more willingly accept others' occupational licenses, especially if the relevant states have begun and are continuing to perform rigorous cost-benefit analyses, or if they are following the best-practice recommendations set forth by the aforementioned federal working group.

Generally, states should want to accept each other's licensed workers since it is in their best interest from both a revenue-raising and a job-creating perspective. Moreover, the federal working group should include as part of its best-practice recommendations successful examples of reciprocity agreements among states. Including reciprocity agreements in the set of best practices would provide states with information about these agreements' economic benefits and generate greater incentives to adopt such agreements, especially in the face of the federal grant process. Finally, one of the conditions for winning a federal grant for occupational licensing reform should be that states accept, as a default, licenses from other states who meet the standards set forth by the working group. In cases where a state does not want to accept other states' licenses, it should be able to convincingly demonstrate that its requirements need to be stricter than those of other states as a result of unique conditions or qualities in that state.¹⁵

Calls to reduce occupational licensing barriers to interstate mobility have come from the executive branch of the federal government, including the Departments of Defense and the Treasury (U.S. Department of the Treasury and U.S. Department of Defense 2012). The executive branch has made these policy recommendations because, due to variations in state licensing laws, the families of some military personnel have had a difficult time pursuing their careers, as the military moves personnel between states. The Department of Defense views this situation as creating a hardship on military families. The recognition of occupational licenses across states, similar to the existing recognition of commercial trucker licenses across states, would serve to help military families and other workers who are required to relocate due to a job for a spouse or other family member. Furthermore, expanding endorsement and reciprocity is more often supported by members of a profession than is deregulation, and thus is likely to be met with less political opposition.

Recognition of occupational licenses across states may not benefit all licensed workers equally. For example, the decision to move often depends on both age and education, with younger and more-educated workers often having the most to gain from migration. One would therefore expect that the higher the educational requirements for entry to a given licensed occupation, the more sensitive migration would be to agreements that reduce relicensure costs (Davies, Greenwood, and Li 2001; Sjaastad 1962).¹⁶ Since more-educated individuals often have greater opportunities to seek and obtain higher

returns on their investment in education, they would be more likely to move to obtain a better job or higher pay. The evidence in numerous empirical studies suggests that this is the case (Molloy, Smith, and Wozniak 2011).

4. CERTIFICATION POLICIES AS A SUBSTITUTE FOR LICENSING

The analysis of the benefits and costs of licensing may find that some occupations would benefit from lesser forms of regulation, such as certification or registration, or even no regulation. For example, services provided by locksmiths, ballroom dance instructors, interior designers, pet groomers, and auctioneers may not pose sufficient risk to health and safety to warrant the full regulation or right to practice of licensure. An additional policy would be to suggest that the state transfer occupations such as these from licensing to certification or other forms of regulation. One illustration of this approach is a bill proposed by the Minnesota Senate Commerce and Consumer Protection Committee that explicitly favors lighter regulation. The bill states, “No government shall require an occupational license, certification, registration, or other occupational regulation that imposes a substantial burden on the person unless the government demonstrates that it has a compelling interest in protecting against present and recognizable harm to the public health and safety.” Additionally, the bill favors the least intrusive form of regulation consistent with appropriate levels of health and safety: “If the individual meets the burden of proof . . . the government must then demonstrate by clear and convincing evidence that the government has a compelling interest in protecting against present and recognizable harm to the public health and safety, and [that] the regulation is the least restrictive means for furthering that compelling governmental interest.”¹⁷ Legislation covering similar issues has been introduced in the Utah legislature (Goldstein 2012).

The proposed Minnesota statute goes a long way toward favoring a policy of the least possible regulation of occupations by the government. It places the largest burden of proof on the state or local government to show that there are compelling health and safety issues that warrant licensure, and it allows the courts to determine whether anyone has been harmed by the absence of licenses. One possible drawback of the proposed licensing regulation in Minnesota would be increased litigation costs if unlicensed individuals who thought that they should be allowed to work in a licensed occupation were to engage the state in a significant number of lawsuits. However, these legal costs could be balanced by the reduction in the number of staff from regulatory agencies monitoring these workers. In addition, the reduced barriers to entry would stimulate competition and allow consumers to benefit from lower costs, which could increase the quantity of services demanded and boost tax revenues for those services that are taxed. Also, the disputes that currently occur between licensed occupations or

licensed and unlicensed occupations that lead to court cases—and the costs of adjudicating them—would be reduced.

To the extent that the research on occupational licensing has influenced policy, another illustration comes from Iowa. In 2013 Governor Terry Branstad of Iowa vetoed a proposal to license four counseling occupations in the health sector (Iowa Board of Certification 2013). In his veto letter to the speaker of the Iowa House of Representatives, the governor both emphasized that certification in these cases is a well-functioning and cost-effective method of regulation, and highlighted the economic costs of licenses. For example, he argued that by requiring a bachelor’s or master’s degree, licenses would bar future workers with perfectly adequate skill levels from entering these occupations (Iowa Board of Certification 2013).

Furthermore, in other states such as Michigan and Florida relevant legislative committees have passed bills to implement widespread licensing reform, but the full legislatures have not subsequently passed them. Michigan, however, has eliminated licenses for occupations with few workers, such as community planners and auctioneers. Many of the specific occupations that were targeted for deregulation, as well as other regulated occupations in the state, lobbied effectively against deregulation. Given the political difficulty to pass legislation that would move occupations from full licensing to certification, I also consider other potential options that do not require removing occupational licensure.

One policy option would be for state legislatures or regulatory agencies to grant private certifying organizations the authority to qualify individuals to do the work of licensed individuals. These unlicensed individuals would be required to post an appropriate job-specific bond, the amount for which would be determined by the state legislature or the administrative or regulatory agency overseeing the occupation (Schlomach 2014). The bond would be the equivalent of purchasing malpractice insurance against service providers’ potentially incompetent or unscrupulous behavior. The bond would provide the consumer some protection against shoddy service providers similar to that provided by mortgage brokers or contractors who carry bonds to protect and reassure customers. This process would provide a much lower cost to enter the occupation than the recurring education and testing requirements currently in force with occupational licensing. The state could impose a registration fee to recoup its costs for administering the process to include the private certifying organizations.

Individuals who are certified by a participating private certifying organization could engage lawfully in the occupation for which they are privately certified regardless of any occupational regulation enacted by the government. The government would not prohibit or impose a penalty, fine, or fee on them, and they could use the term “privately certified”

to describe credentials (or as part of a title or designation) and would be legally able to provide all the services of a licensed provider (Schlomach 2014).

This proposal would provide market-based competition to licensed workers and could diminish some of the limited access to services that results from having only the more restrictive process of occupational licensing. The public would be protected by the required bond, and the certifying organization would have an interest in educating and certifying individuals who would provide high-quality services to the public. Certifying organizations have an incentive to be perceived as high quality and reputable because they can then charge higher fees and tuition for attending their training programs. Microsoft and the CFA Institute (which grants the title of chartered financial analyst) are illustrations of organizations with high-quality certification programs. Another example is ISACA, an independent, nonprofit association, that provides four different certifications for occupations related to information systems. Overall, recent analysis of certification programs shows that they can have positive economic returns for the workers (Gittleman, Klee, and Kleiner 2014).

ARGUMENTS AGAINST EASING LICENSING REQUIREMENTS

The main argument against relaxing occupational licensing is the extent to which health and safety standards might be compromised. Certainly there are potentially large consequences: for example, if an incompetent boilermaker were to install or repair a furnace in a large building, the furnace could catch fire, with disastrous results. To the extent that occupational licensing reduces the likelihood of such an

event occurring, it is more likely that the benefits of licensing outweigh the costs. As illustrated earlier, however, many occupations that are currently licensed in some states are unlikely to present such dangers.

A secondary concern is the potential for losses in the quality of services if training and experience requirements were reduced. Although reducing licensing standards may in some cases reduce quality, studies have not found evidence in support of this theory, in part because quality is hard to measure and in part because licensing standards are not always closely tied to the ability to do the job. Nevertheless, even if quality were to fall for some services, it would need to be weighed against the lower prices—and greater access for lower-income consumers—for which the economic evidence is far stronger. That is, if licensing results in higher prices that prevent some lower-income consumers from purchasing the service at all, it may be worthwhile to relax licensing if the reduction in prices allows more consumers to access the service at a slightly lower quality.

Finally, workers in low-income occupations, such as cosmetologists or manicurists, could see their earnings fall if licensing in their occupations were reduced. These potential losses to members of a previously licensed occupation should be balanced against the greater number of individuals who could enter the occupation due to diminished entry costs and thus increase their own earnings. Potential one-time payments to the incumbent licensed practitioners could compensate them, at least in part, for their loss. These payments could possibly take the form of rebated licensing fees and be paid for by the economic gains—and higher tax revenue—from the reduced licensing.

Chapter 5. Questions and Concerns

ARE THERE LESSONS TO BE LEARNED FROM EXISTING TEMPORARY AND PROVISIONAL LICENSING PRACTICES, SUCH AS RECIPROCAL RELATIONSHIPS FOR VETERANS?

Numerous states, including Alabama, Iowa, and Texas, have passed laws allowing veterans to count their hours of military training toward their state licensing qualifications for several occupations, ranging from emergency medical technicians in health care to electricians and plumbers in construction. Thirty-four states waive the driving skills test for veterans with a record of safely operating vehicles similar to the trucks and buses for which a commercial driving license is required. To date there do not appear to be any negative consequences of using military training as a substitute for state licensing requirements (U.S. Executive Office of the President 2013). These initial results suggest that greater use of reciprocity-based agreements and provisional licensing is unlikely to lead to a reduction in the quality of services provided.

ON WHICH AGENCIES OR GROUPS CAN STATE GOVERNMENTS RELY TO CONDUCT OBJECTIVE COST-BENEFIT ANALYSES?

All state governments contain agencies that are designed to be nonpartisan. For example, the Office of the Legislative Auditor in Minnesota analyzes policy issues and produces factual reports on them to the legislature, but does not advocate specific policy choices. In Colorado, DORA serves as a model of a nonpolitical agency that provides advice on occupational licensing policy issues. At the federal level, the Government Accountability Office issues nonpartisan reports

that are generally not considered to be politically motivated.¹⁸ While the ultimate decision to regulate an occupation rests with the legislature and governor, experience suggests that the data and analyses generated by these nonpartisan agencies would carry substantial weight in the regulation decisions.

WHY NOT CALL FOR THE FEDERAL GOVERNMENT TO SIMPLY REQUIRE THAT CERTAIN OCCUPATIONS NOT BE LICENSED?

The major Supreme Court case that established the right of states to grant licenses was *Dent v. West Virginia* in 1889. The decision established state law regarding physicians to protect the health, welfare, or safety of citizens. In contrast, the National Labor Relations Act (1935), which governs labor management relations, was passed at the federal level and preempts state laws in regulating private sector unions. The states view occupational regulation as their appropriate venue, and are not likely to give up their jurisdiction of this type of regulation. However, other nations as diverse as China and the United Kingdom have legislation at the national level governing the regulation of many occupations (Chi, Kleiner, and Qian 2014; Koumenta et al. 2014). In the United States, where the law and custom of federalism devolves licensing to the states, national legislation could hamper the ability of the states to craft laws that best fit their social and economic climate. Consequently, although national legislation on occupational regulation could harmonize licensing laws, it does not appear politically feasible or economically desirable for local interests to not be considered.

Chapter 6. Conclusions

Occupational licensing has been one of the fastest-growing labor market institutions in the United States since World War II. Evidence from the economics literature suggests that it influences the allocation of labor and capital in critical areas of the economy such as health care, construction, and education, and has had an important impact on employment, wage determination, employee benefits, and prices. Some even suggest that occupational licensing dampens the rate of innovation within an occupation by setting fixed and in some cases arbitrary rules. There are broad implications for the well-being of Americans as a consequence of the uneven and haphazard development of occupational licensing and lack of consistency across states in the education and training of

occupational licensing requirements. The burden should be on the government together with the associations representing the occupation in question to demonstrate that the social benefits of these requirements exceed the economic costs. If the benefits to the public exceed the costs, governments and the interest groups should also demonstrate that the proposed regulations are the least restrictive means of furthering the goals of the regulations.¹⁹ In addition, I propose that state and local governments develop and execute a plan for evaluating existing occupational licensing requirements. The evaluations should be based on existing studies or new analyses. When the costs of regulation are shown to exceed the benefits, the requirements should be modified or dropped.

When licensing is deemed to be in the interest of the public, weighed against the economic costs, states and localities should accept, as much as possible, licenses granted in other states.

licensed individuals. The proposals in this paper have focused on developing a rational approach within contemporary political constraints that moves the U.S. labor market toward more-reasoned regulation of occupations.

Specifically, given the costs of occupational licensing to the economy and the inconsistency and variability of licensing across states, I am proposing four major policy changes to reduce the regulatory costs of occupational licensing.

First, I suggest that state and local governments require and perform cost-benefit analysis prior to approving new

Second, the federal government can take a lead role in establishing a set of best practices through an evaluation of policies that have been shown to work and that may provide greater employment growth and lower prices, while maintaining service quality. The federal government can also encourage states to reevaluate occupational regulation by providing grants similar to those in the Race to the Top education program; these grants would be paid for by the economic gains to the economy of greater deregulation. A consortium of individuals from a number of government agencies, similar

to the current Working Group on Expanded Measures of Enrollment and Attainment, and private experts could be enlisted to evaluate the proposals.

Third, licensing standards should allow individuals to move across state lines with minimal retraining or residency requirements. When licensing is deemed to be in the interest of the public, weighed against the economic costs, states and localities should accept, as much as possible, licenses granted in other states. This proposal would facilitate mobility across states and would make it more difficult for special interests to

tighten regulations in order to increase their monopoly status in a given state. Adopting this proposal among the ten pairs of states with the most mobility between them would go a long way toward addressing the harmful impacts of licensing on individual's migration decisions.

Fourth, where politically feasible, state governments should reclassify certain occupations that are licensed to a system of certification or no regulation. This could be accomplished either by deregulating licensed occupations and turning them into certified ones, or by creating competition from individuals who are certified by private organizations. These individuals would be able to work with licensed individuals if they have appropriate bonding to protect consumers against shoddy service (see Schlomach 2014).

The proposals noted in the paper would benefit many workers, including those who could forgo unnecessary requirements and long-term training and have greater opportunity to find work in states that have more-rapid employment growth and better-paying jobs. Consumers would benefit by having

services at lower costs. Lower-income individuals, for whom training requirements and higher prices are especially burdensome, would likely be helped the most. Incumbent licensed workers in low-wage occupations, whose earnings might fall under a reduction in licensing, could receive one-time payments to compensate them in part for their loss; these payments could be funded through the economic gains—and higher tax revenue—from reduced licensing.

Given the evidence on the economic costs and benefits of occupational licensing, a reduction in licensing restrictions—achieved through the implementation of the four proposals I have put forward—would lead to employment growth in affected occupations and a reduction in prices. The loss of fee revenue from occupational licenses would be offset by taxes from higher employment and additional transactions. Replacing licensing with certification in certain occupations and providing more competition would in most cases result in substantial gains in economic growth and employment without measurable harm to consumers.

Chapter 7. Appendix

Harris Poll Interactive developed survey weights to compensate for variation in selection probabilities, differential response rates, and possible undercoverage of the sampling frame. The derivation of the sample weights focused primarily on matching the marginal distributions of the U.S. Census Bureau’s Current Population Survey by sex, age, educational attainment, census region, urbanization, race, Hispanic ethnicity, employment status, and class of employer (private, government, etc.).

Harris derived the questions of the 2013 survey from a 2008 Westat questionnaire that researchers at the Princeton Data Improvement Initiative at Princeton University used to assess the accuracy of self-reported occupational licensing and certification. The key questions were 11, 11a, and 12:

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

- YES1
- NO2
- IN PROCESS/WORKING ON IT3

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

- YES1
- NO2

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

- YES1
- NO2

Those who answered question 11 in the affirmative were asked additional questions about the agency (federal, state, or local) that required their license or certificate, and the requirements they needed to satisfy, such as achieving a high school diploma or college degree, passing a test, demonstrating certain skills, or completing an internship or apprenticeship.

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Endnotes

1. The District of Columbia is treated as a state throughout this paper because it has its own licensing and certifying regulations.
2. For additional examples, see Carroll and Gaston (1981).
3. A basic examination of the national costs of licensing could be developed as follows, yielding these numbers: Suppose that the entire 15 percent wage premium for licensing mentioned in the text is from market power (as opposed to greater productivity from enhanced human capital), and further assume that labor supply is perfectly elastic and the labor demand elasticity is 0.5 (Hamermesh 1993). The calculation is that approximately 38 million licensed workers in the United States in 2010 (about 29 percent of the eligible workforce) multiplied by the .15 wage premium multiplied by the elasticity of 0.5 results in a loss of 2.85 million jobs. Furthermore, the average annual earnings of $\$41,000 / 1.15 = \$35,652$ if there is no wage premium for licensing. Therefore, $\$41,000 - \$35,652 = \$5,348$ is the economic rent for a licensed worker. Consequently, licensing results in an annual cost to consumers of $\$5,348 \times 38$ million which is approximately \$203 billion.
4. National Labor Relations Act 29 U.S.C. §§ 151-169 (1935); *Dent v. West Virginia*, 129 U.S. 114 (1889).
5. This value is lower than the 38 percent found by Kleiner and Krueger (2013) based on a 2008 Westat survey. The difference may reflect the larger sample size of the Harris data (the Harris sample was almost four times the size of the Westat sample), the sample selection criteria, or the method of data collection (phone survey versus an online survey). In addition, unlike the Westat sample the Harris poll did not use a validity check on the quality of the responses by occupation. The number of state-level observations varies from 146 in Tennessee to 222 in the District of Columbia, and averages 193 per state.
6. See Kleiner (2006, table 3.3) for a full listing of price effects of occupational licensing.
7. *North Carolina State Board of Dental Examiners v. Federal Trade Commission* N.C. 12-1172 (2014).
8. Under Colorado's sunset laws, many state functions and agencies are automatically terminated at a certain date unless the functions or agencies have been expressly reauthorized by the state legislature (Colorado Legislative Council n.d.).
9. Telephone conversation with Lauren Larson, January 5, 2015.
10. DORA's budgetary structure, however, may provide incentives for greater regulation in order to generate additional state revenues.
11. The current group consists of individuals from the U.S. Census Bureau, Bureau of Labor Statistics, Council of Economic Advisers, National Center for Education Statistics, National Center for Science and Engineering Statistics, National Science Foundation, Office of Statistical and Science Policy in the Office of Management and Budget, and Office of the Under Secretary of the Department of Education.
12. Although state- and local-level representatives could play a significant role in developing and promoting the best-practice recommendations, it is important that these representatives be excluded from the panel of experts responsible for reviewing and selecting the grant plans.
13. Although the key responsibility of licensing rests with the states in line with the *Dent v. West Virginia* (1889) case mentioned earlier, it is legally uncertain whether the federal interstate commerce or full faith and credit clauses in the Constitution relate to occupational licensing.
14. Using public-use micro sample data from the 2000 Census, the ten state pairs with the most gross mobility between them from 1995 to 2000 were New York and Florida; New York and New Jersey; California and Nevada; California and Texas; California and Arizona; Florida and Georgia; California and Washington; California and Oregon; California and Colorado; and New Jersey and Pennsylvania (Perry 2003).
15. For example, a licensed civil engineer moving to California would need to know earthquake faults and the state's unique terrain for road construction approvals and examinations.
16. This scenario would also be the case if wage differentials across states were greater for occupations requiring more education, which is consistent with observed patterns (Davies, Greenwood, and Li 2001).
17. SF 380 87th Leg. (2011–12), sec. 1, subd. 2(b), 3(d). <https://www.revisor.mn.gov/bin/bldbill.php?bill=S0380.1.html&session=ls87>.
18. With the growth in federal surveys that currently or will track occupational licensing issues, such as the Survey of Income and Program Participation, the Current Population Survey, and the National Survey of College Graduates (to take place in 2016), data gathering and analyzing information on the topic will continue to improve and so make objective, nonpartisan analysis more transparent.
19. This proposal was introduced in the Minnesota State Legislature (2012) in a recent legislative session.

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Highlights

Morris M. Kleiner of the University of Minnesota offers four proposals with the goal of systematizing and harmonizing occupational licensing regulation. Together, these proposals would reduce the regulatory and economic costs of occupational licensing among states while increasing employment opportunities and expanding consumer access to services.

The Proposal

Cost-Benefit Analysis to Evaluate Occupational Licensing. State governments, together with the relevant occupational associations, would perform cost-benefit analysis on new and existing occupational licensing regulations. The analyses would rely on both new and existing studies.

Federal Engagement to Promote Best Practices. The federal government would establish a federal interagency group to promote best practices in occupational regulation. States would also be encouraged to apply for federal grants for evaluating and improving their current system of occupational licensing.

State Reciprocity. States would develop reciprocity agreements to more readily accept occupational licenses granted by other states with similar licensing requirements.

Certification Policies as a Substitute for Licensing. When the costs of licensing exceed its benefits, states would consider transferring away from licensing to a lesser form of regulation, such as certification or registration, or even to no regulation.

Benefits

If state and local governments were to undertake these proposals to streamline occupational licensing, available evidence suggests that employment in these occupations would grow, the prices for services would fall, and access to services would increase, all while minimizing harm to public health and the economic well-being of certain regulated workers. These reforms would not be costless since states would lose revenue from licensing fees for occupations that are deregulated. Estimates suggest, however, that increases to income and payroll taxes from higher employment and more-frequent consumer transactions could partially or wholly replace the lost revenue stream.



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