

# How Does Occupational Licensing Affect U.S. Consumers and Workers?

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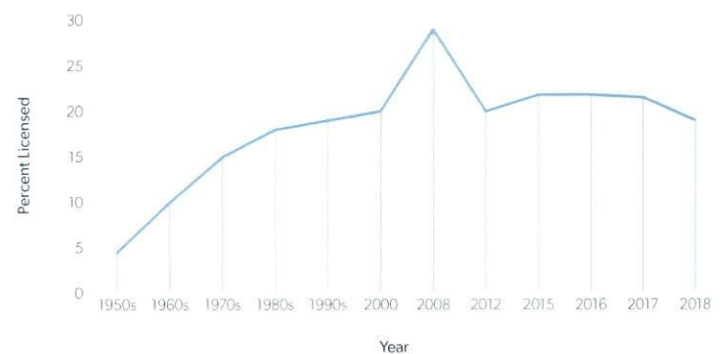
December 2018  
Research in Focus 2018.002

Occupational licensing laws are generally justified as necessary consumer protections. In theory, requiring workers in certain fields to possess licenses stops incompetent service providers from deceiving uninformed customers and gives customers reason to expect a fair quality of service. While licensing may provide consumers with a signal of worker quality, it can also bring negative effects by raising prices and slowing job growth in licensed fields.<sup>1</sup>

Recent surveys illustrate the widespread use of licensing. Estimates vary, but the data show that between a fifth and a third of American workers require a license to legally work. The US Census Bureau's 2016 Current Population Survey (CPS) finds that among employed civilians, 22.3 percent held an active license in 2016, compared to only 4.5 percent in the 1950s.<sup>2</sup> These numbers were higher for employed women (27.9 percent) and for workers with more education (46.5 percent for those with advanced degrees; 14.2 percent for high school graduates).<sup>3</sup> Occupational licensing experts Morris Kleiner and Alan Krueger find that 29 percent of U.S. workers needed a license in 2008.<sup>4</sup> Because of the dominance of licensing, less than 3 percent of all workers had a voluntary certification, which signals completion of a professional association's training, but no license in 2016.<sup>5</sup> Figure 1 shows the share of the workforce with occupational licensing requirements from 1950 to 2016. The data clearly shows that there have been substantial increases in licensing requirements since 1950. Between a fifth and a third of American workers were required to have a license to legally work in 2018.

This paper examines the existing research on the effects of occupational licensing and concludes with a discussion of possible reforms. Existing studies have yet to find a definitive link between licensing restrictions and their stated purpose of improving service quality.<sup>7</sup> Several studies do find, however, that licensing requirements raise pay for licensed workers, but with a cost: reduced employment and higher consumer prices. Overall, the evidence suggests there may be gains from policy reforms that allow greater room for less restrictive alternatives, such as voluntary certification.

Figure 1: The Licensed Share of the US Labor Force (1950-2018)<sup>6</sup>



Note: Data on the share of the licensed workforce are still being refined. For example, the drop from 29% in 2008 to 20% in 2012 reflects changes in method and data sources, not necessarily a reduction in licensing requirements. The data is clear, however, that there have been substantial increases in licensing requirements since 1950. Between a fifth and a third of American workers are required to have a license to legally work. The graph's data come from a variety of sources, but are reported widely by occupational licensing experts. Data for 2012 come from a report by the Department of the Treasury Office of Economic Policy, the Council of Economic Advisers, and the Department of Labor (2015). The data for 2015, 2016, and 2017 come from the Bureau of Labor Statistics's Current Population Survey (2015, 2016, 2017). The data for 2018 come from a paper by Kleiner and Vorotnikov (2018).

## Occupational Licensing Impacts Labor Supply

By imposing higher barriers to entry, licensing requirements reduce the pool of available workers in an occupation. Some potential workers in licensed fields see the educational, training, residency, or testing requirements as too costly and may shift into an unlicensed field instead. This shift raises wages for licensed workers but lowers them in the unlicensed sector, which may make the work there sufficiently unattractive to drive some workers into other industries and others out of the labor force entirely.<sup>8</sup>

Research attributes reductions in labor supply and slower job growth to the introduction of licensing. One estimate finds that licensing reduces the share of workers in the licensed occupations by 17-27 percent.<sup>9</sup> In real terms, this means that for every five individuals now in a licensed occupation there is a missing sixth worker who does not work in the field because of licensing requirements.<sup>10</sup> Another study compares the growth of licensed occupations to that of unlicensed occupations and concludes that "licensing reduces the percentage growth rate [of employment in the occupation] by a statistically significant 20 percent" over a decade. By this calculation, a licensed occupation that grows by 10 percent over the decade would have grown by 12 percent if not for the presence of licensing.<sup>11</sup>

By slowing growth, licensing can have large negative effects on the total number of jobs and increases costs for consumers. Three economists estimated that licensing in the United States “results in 2.8 million fewer jobs” and costs consumers \$203 billion annually. These losses originate from two sources.<sup>12</sup> First, licensing causes wealth transfers from consumers to licensed workers who can charge higher prices for their services. Second, licensing reduces efficiency.<sup>13</sup> One reason for these losses is that workers in licensed fields may not be able to easily move to another geographical area because licensing requirements differ widely across state lines.<sup>14</sup> Although actual costs may differ from preliminary and rough estimates, past research suggests that reforms could lead to higher rates of employment in the licensed fields.<sup>15</sup>

### **Occupational Licensing Impacts Wages**

Licensing may affect the wages of licensed workers in two ways. First, licensing can improve the quality of services by barring low-quality workers from an industry.<sup>16</sup> Wages then rise for licensed workers because of the higher-quality services they provide. Second, licensing may insulate workers from competition by restricting the supply of services in a licensed occupation.<sup>17</sup> Whatever the reason for these increases in cost, consumers pay the difference.

The difference between an actual wage and what that wage would be without licensing is known as a wage premium.<sup>18</sup> Estimates of the size of the wage premium vary widely depending on the occupations studied and the empirical method and data used. Because licensed workers tend to have higher education levels than unlicensed workers, a simple comparison of wages between licensed and unlicensed workers is misleading. To get around this issue, many researchers compare wages of licensed workers to wages of unlicensed workers in similar occupations, or to wages of workers in the same job in a state where licensing is not required. Using this approach, Kleiner finds an average wage premium of 10 to 12 percent for licensed occupations.<sup>19</sup> A study specific to massage therapists similarly finds a 16.2 percent wage premium for those in licensed states.<sup>20</sup> Other recent estimates range anywhere from 0 to 18 percent, though most fall in the range of 6 to 15 percent, with lower estimates generally relying on newer and more accurate data.<sup>21</sup>

One unique way to investigate wage premiums is to see how workers’ wages change when they move from a licensed to an unlicensed job or vice versa. Although workers’ wages tend to increase when they switch jobs, research shows that those who switch to a licensed field saw wage increases 17 percent larger than those who switch to an unlicensed job.<sup>22</sup> Because simply switching jobs is unlikely to significantly change a person’s skill level, licensing itself likely contributes to the wage increase.

Although licensing provides a wage premium for most licensed workers, the premium is higher in some occupations than others. Occupations that involve more independent work and less subordination to superiors (for example, dentists rather than dental hygienists) tend to have higher wage premiums.<sup>23</sup> Lawyers and doctors experience higher wage premiums due to licensing than barbers or nurses, likely because of the more rigorous licensing requirements for these occupations. In other words, those in

wealthier professions generally receive higher wage premiums than those in lower-income occupations.<sup>24</sup>

In addition to variations in wage premium by occupation, there are also differences based on worker characteristics such as race and gender. A 2018 paper shows that minorities and women receive higher wage premiums than white men. For example, black women and white women both obtain higher wage premiums than white men.<sup>25</sup> The researchers suggest that this may be because licensing’s market signal for employers is stronger for some groups of workers than others.<sup>26</sup>

### **Occupational Licensing Impacts the Quality of Service**

Wage premiums mean higher prices for consumers, which could be justified on the grounds that licensing provides proportional increases in quality. Yet evidence for and against quality improvement due to licensing is mixed.

In a 1979 paper, Stanford economist Hayne Leland summarized the benefits of licensing for improving quality. He explains that licensing generally arises in markets where one party knows more than the other, such as medicine, where (for instance) a parent does not have an easy way to ascertain the quality of a pediatrician. If people cannot tell good doctors from bad, then doctors as a group will have to charge lower prices. This, in turn, could prompt the good doctors to leave the market, preventing consumers from receiving high-quality care.<sup>27</sup> Ideally, licensing serves as a quality assurance mechanism that not only informs customers but gives quality service providers a reason to remain in the market.

While licensing may provide a useful way to indicate minimum standards of quality, empirical studies suggest it does not necessarily improve quality. In a 2000 study, professors Morris Kleiner and Robert Kudrle find that dental outcomes are not improved by more stringent licensing for dentists.<sup>28</sup> Similar findings are common in the literature. One paper concluded that allowing nurses to perform services that had previously been reserved for doctors lowered prices for consumers without worsening health outcomes.<sup>29</sup> Another study of the effects of licensing laws for nurses found no effect on quality of care and even some evidence of benefits of lesser restrictions for nurses. It concludes that, instead of improving quality, licensing laws primarily serve as barriers to care.<sup>30</sup>

Licensing may have little effect on quality if the licensure process does not improve the skills or knowledge of licensed workers. For example, US Department of Labor economist Alex Maurizi studied the effects of a license for general contractors in California that required them to pass a written test. He found that the test failed to provide a guarantee of higher quality. Some applicants circumvented minimum quality standards by using past test information to obtain passing scores without learning competent contracting skills. This happened because the test stagnated. Maurizi reports that over an 11-year period, the contractors’ licensing exam “changed little,” and that half of the exam “did not change at all.” Therefore, Maurizi concludes that some consumers “may be receiving a quality of service quite similar to what would prevail in the absence of licensing, and they may be paying higher prices for that quality.”<sup>31</sup>

Even if licensing does increase quality, it might not benefit all consumers. Some studies have found instances where licensing can improve the average quality of a service, such as the case of early 20th century midwifery laws or more recent state child care regulations.<sup>32</sup> However, in the latter case, the authors Joseph Hotz and Mo Xiao point out that the regulations also reduced the number of providers, particularly in low-income areas.<sup>33</sup> Consumers then could no longer express a preference for lower-quality but also lower-cost services. In this way, licensing can price some consumers out of licensed services. Therefore, even though average quality improved as a result of licensing, the beneficiaries were disproportionately wealthy, while the poor sometimes lost access altogether.<sup>34</sup>

In the same line of research, a 2017 paper by Jonathan B. Berk and Jules H. van Binsbergen shows that when regulations push out charlatans, they do so by reducing competition and so ultimately harm consumers.<sup>35</sup> As health economist Victor Fuchs concludes, "The existing [licensing] system results in some persons receiving no care, or being treated by individuals without any medical training."<sup>36</sup> If licensing causes some people to receive superior care while others get none, it may be hard to tell whether licensing is a net welfare benefit or loss.

### **Improving Occupational Licensing**

Customers certainly need information about the quality of goods and services. Occupational licensing, however, is not the only means for providing that information. With the rise of online ratings, information about quality is widely and freely accessible. Consumers can find reviews online via social media and platforms such as Angie's List, Yelp, and TripAdvisor.<sup>37</sup>

If more information is needed than free online reviews can provide, another option is voluntary certification. Certification accommodates customers who want guarantees of quality and still allows service providers to differentiate on their service quality to appeal to different segments of the market. Certification does not require that individuals obtain a certificate to practice in their field, but certificates acquired from the government or private associations can give workers a distinguishing credential to signal higher-quality services. Private certifications are available for workers in a variety of occupations including car mechanics, counselors, and respiratory therapists. State certifications signal quality and come with the right to use a specific title, for example, certified financial planner or dietician.<sup>38</sup>

Another possibility to reduce licensing's negative effects on consumers and workers is to increase portability for workers to move between states or practice independently while working towards a license. These changes would likely increase the supply and mobility of labor, as they give workers greater opportunity to practice their trade. Although some states already allow workers with licenses from other states to work without undergoing tests or further education requirements, portability is limited. Most state licensing rules require that workers meet all requirements to obtain a license in that state.<sup>39</sup> For example, licensed journeyman electricians moving to Montana can easily become licensed if they hold a current license from one of 14 other states. Master electricians, however, must pass a Montana exam even if they hold a master license from one of those other states.<sup>40</sup> One

example of reciprocity is the Nurse Licensure Compact, which allows licensed nurses to practice in any state that agrees to the licensing compact.<sup>41</sup>

Certification has the potential to provide many of the same signaling benefits as occupational licensing without slowing employment growth or raising prices for consumers. Certification provides more flexibility than licensing while also signaling higher quality for consumers seeking it. Legislators should carefully consider changes to occupational licensing. Reforms that lessen the stringency of occupational licensing are likely to benefit consumers and workers alike.

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