

# VALUING PROFESSIONAL LICENSING IN THE US

A REPORT FOR THE ALLIANCE FOR  
RESPONSIBLE PROFESSIONAL LICENSING

JANUARY  
2021



# EXECUTIVE SUMMARY

Professional licensing is the process to become credentialed in a profession. Its main purpose is to indicate that a practitioner is capable of performing a certain type of work safely and competently, in order to protect public health, safety, and welfare. To become licensed, workers need to meet education, examination, and experience requirements, which differ by profession.

**1 in 4 workers**

holds a certificate or  
license in 2019 in the US



Over the past decades, the proportion of US workers holding an occupational license or certification has increased from about 5% of workers in the 1950s to about one in four (24%) workers holding a certificate (2%) or license (22%) in 2019, according to the Bureau of Labor Statistics. Licensing can provide significant safeguards and advantages to consumers, protecting them from low-quality providers and overpriced services. Nevertheless, critics and some legislators argue that the US licensing systems also create substantial costs, by artificially increasing licensing requirements beyond the skills needed for the job and in turn raising the price for the consumer.

Calls for deregulation, however, are often not narrowly tailored to address specific trades and vocations. Many of the current draft bills instead propose to discard licensing systems for all occupations—weakening or eliminating licensing standards for professions including **engineers, surveyors, architects, landscape architects, and certified public accountants (the licensed**

**professions represented by ARPL members and evaluated in this study).** Interestingly, unlike these blanket calls for deregulation, consumers seem to have a much clearer understanding of the difference between occupational and professional licensing. Some 75% of the respondents to a Benenson Strategy Group survey were supportive of licensing regulations for highly technical professions that have a direct impact on public health and safety.<sup>1</sup>

Against this backdrop, **the Alliance for Responsible Professional Licensing (ARPL) is seeking to deepen understanding of the full impact of professional licensing.** ARPL is composed of four national associations that represent the above-mentioned highly complex, technical professions, and their state licensing boards. Its mission is to promote a responsible approach to professional licensing, and this is achieved by educating policymakers and the public on the importance of high standards within their professions, as well as offering best practices and advocating for uniform qualifications and standards. To pursue this mission, ARPL commissioned Oxford Economics to undertake independent research to review the evidence base in this field, analyze characteristics of the professional workforce, and empirically show the effects of occupational licensing across the skill spectrum.

## LITERATURE REVIEW

The academic literature on professional licensing is extensive. On the one hand, theory suggests that licensing has the potential to protect the public against incompetent practitioners and create clear career paths for workers. It can also

<sup>1</sup> Benenson Strategy Group (BSG) and ARPL, "Exploring Public Opinion of Professional Licensing", available at: <http://www.responsiblelicensing.org/new-research-exploring-public-opinion-of-professional-licensing/>

help consumers distinguish high- and low-quality providers. On the other hand, scholars have argued that licensure reduces employment in the licensed occupation, and hence competition, in turn driving up the price of goods and services. This study reviews the impact of licensing on wages, mobility, and its effects on women and minorities.

The impact of licensure on salaries has been studied extensively. Most studies find that unlicensed workers earn 10% to 15% lower wages than licensed workers with similar levels of education, training, and experience. **Licensing can yield wage premia** for two theoretical reasons: 1) it functions as a signal of high productivity, similar to a university degree; and 2) it increases barriers to entry, thereby reducing the availability of practitioners and increasing wages. Koumenta and Pagliero (2019) estimate that the latter channel accounts for about one-third of the wage effect and the remaining is attributed to signaling. This finding suggests that the barriers posed by licensing programs play a much smaller role than many critics may think compared to the stronger productivity effect.

Several scholars have attempted to determine **how licensing impacts different demographic groups**. The majority of the findings tend to find greater wage premia from licensing for female and minority workers, suggesting that entering a licensed occupation could help level the playing field for these groups, and even narrow or close wage gaps. For example, Bailey and Belfield (2018) find that, across college-educated workers, a license is associated with gains in earnings of 20% and 8% for female and male workers, respectively.

Another widespread subject in the licensing literature is **worker mobility**. The professions of interest in this study have made significant efforts to harmonize the system and make it easier for professionals to migrate across states. Architects with a National Council of Architectural Registration Boards (NCARB) Certificate, for example, can apply

for reciprocal licensure in all 55 US jurisdictions. Literature on the subject finds that regulatory harmonization increases cross-border labor migration, suggesting that it is not the licensing system per se that potentially discourages mobility, but rather the different state-level requirements.

**10-15%** lower wages  
paid to unlicensed workers compared  
with licensed workers with similar levels  
of education, training, and experience



## WORKFORCE CHARACTERISTICS

This study goes beyond literature reviews and dives deeper into the professions of interest to ARPL. We show that, across all professions, women and ethnic minorities (here defined as non-white) still tend to be underrepresented. Encouraging signs, however, come from the gender and ethnic composition of students and graduates in the relevant disciplines. Across the board, the intake of new talent appears to be much more diverse than the current stock of licensed workers, suggesting the future of the licensed workforce is likely to be more balanced across genders and races.

**Greater returns from  
licensing for female and  
minority workers**



Clearly, occupational characteristics and competencies vary widely across different professions. Implications on socio-demographic access and equity, as well as broader public safety associated with very high-skilled professions, **require an approach that goes beyond much of the “one size fits all” found throughout much of the literature.**

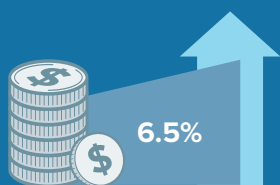


## EMPIRICAL ANALYSIS

In the final section of this study, we therefore show that **licensing has very different effects for professions with high skill requirements and public impact compared to low skill occupations**. We first analyze how the wages of those with licenses or certifications compare with those without, across all occupations. In our baseline specification, the estimates suggest licensing is associated with approximately 6.5% higher hourly earnings, even after accounting for educational attainment, demographic, and occupational characteristics.

6.5%

increase in hourly earnings  
from having a license



We then look at the wage effects of licensing and certification by occupational skill level. We find that, while licensing and skills both increase wages, **licensing has a stronger wage effect at the bottom of the skill distribution**. This implies that both barbers and engineers are better off with a license, but to a very different extent, suggesting that equalizing all licensed occupations under one single regulatory framework could have potentially dangerous and unintended consequences.

5.6%-7.4%

License premium for men  
and women, respectively



Next, we estimate the occupational license premium across all occupations, allowing for heterogeneity by gender and race. We estimate the license premium for men is 5.6%, whereas

the license premium for women equals 7.4%, suggesting **the returns to occupational licensing are higher for women than men**. On the other hand, we find that licenses do not seem to significantly contribute to narrowing the race-driven wage gap among Black and Hispanic professionals across all occupations.

Finally, we attempt to account for differences in the licensing premia due to both gender/race and skill level. We find that a female engineer (an example of a high skill licensed profession) can expect better wage returns to gaining a license than a male engineer, all else equal. The opposite is true among low-skill workers, where men see better licensing returns than women. This finding suggests that **professional licensing among highly skilled professions** (such as that provided by ARPL members) **positively contributes to narrowing the gender-driven wage gap**. Similarly, highly skilled minority workers are found to receive greater returns from licensing than high-skill non-minorities, suggesting that professional licensing among highly skilled professions (including the ARPL professions) **can also positively contribute to narrowing the race-driven wage gap**.

Overall, this study points to the fact that professional licensing of highly skilled workers should be understood and regulated separately from occupational licensing of trades and vocations. This is because:

- Its wage impact is different in size from that of lower-skill vocations;
- It appears to substantially support women and minorities move toward wage parity, and this is only true among highly skilled workers according to our model findings; and
- The level of risk and responsibilities involved in these professions calls for greater scrutiny over these roles and the repercussions of blanket deregulation for public safety and welfare could be considerable.

**Global headquarters**

Oxford Economics Ltd  
Abbey House  
121 St Aldates  
Oxford, OX1 1HB  
UK

**Tel:** +44 (0)1865 268900

**London**

4 Millbank  
London, SW1P 3JA  
UK

**Tel:** +44 (0)203 910 8000

**Frankfurt**

Marienstr. 15  
60329 Frankfurt am Main  
Germany

**Tel:** +49 69 96 758 658

**New York**

5 Hanover Square, 8th Floor  
New York, NY 10004  
USA

**Tel:** +1 (646) 786 1879

**Singapore**

6 Battery Road  
#38-05  
Singapore 049909

**Tel:** +65 6850 0110

**Europe, Middle East  
and Africa**

Oxford  
London  
Belfast  
Dublin  
Frankfurt  
Paris  
Milan  
Stockholm  
Cape Town  
Dubai

**Americas**

New York  
Philadelphia  
Boston  
Chicago  
Los Angeles  
Toronto  
Mexico City

**Asia Pacific**

Singapore  
Hong Kong  
Tokyo  
Sydney  
Melbourne

**Email:**

[mailbox@oxfordeconomics.com](mailto:mailbox@oxfordeconomics.com)

**Website:**

[www.oxfordeconomics.com](http://www.oxfordeconomics.com)

**Further contact details:**

[www.oxfordeconomics.com/  
about-us/worldwide-offices](http://www.oxfordeconomics.com/about-us/worldwide-offices)