Is Occupational Licensing a Barrier to Interstate Migration?

Janna E. Johnson
University of Minnesota

Morris M. Kleiner
University of Minnesota

Occupational licensure, the legal process by which governments establish qualifications to practice a trade or profession, has rapidly become one of the most significant labor market regulations in the United States. The percent of the workforce licensed at the state level grew from around 5% in the 1950s to almost 23% in 2008, with a 28% increase since 1980. At the same time, migration rates within the United States have fallen dramatically, with a decline in the gross flow of people across states of 50% over the last 20 years. We examine to what extent occupational licensing statutes, which impose regulatory costs on moving across state lines, may be a contributing factor to the decline in interstate migration.

As most occupations are licensed at the state level, licensure adds a potential barrier to migration across states for those in licensed professions, as to move across state lines an individual must often fulfill new licensing requirements. For example, a public school teacher with a decade of experience in New Hampshire is not legally allowed to teach in an Illinois public school without taking significant new coursework and meeting state residency requirements. However, actual licensing laws change often. In particular, state policies on accepting those who fulfill licensing requirements in other states as qualified to practice in their state (known as endorsement) and on forming agreements with other states on establishing licensing requirements (known as reciprocity) are constantly being amended. States with reciprocity and/or endorsement policies with other states for a particular occupation therefore have lower potential barriers to interstate migration than they do with other states with whom they do not have such agreements. We plan to exploit the variation in state licensing laws to establish the extent to which occupational licensing has a causal effect on interstate migration.

Although over 800 occupations are licensed in at least one state, to simplify our analysis we consider five occupations licensed in all states: lawyers, dentists, nurses, teachers, and barbers/hairdressers. We chose these five for several reasons. First, all five are large enough occupations to generate a large enough sample size in our data set. Second, these five

occupations range from highly paid occupations requiring high levels of education (lawyers and dentists) to more "blue-collar" occupations (barbers and hairdressers). Third, these five occupations are all licensed at the state level, and all have experienced changes in state licensing requirements for at least some states during our period of analysis.

1 Data

The data we use in our analysis is the public use American Community Survey (ACS). This large, nationally representative survey collects demographic and socioeconomic information, including occupation, annually over the period 2001-2012. Key for our analysis are the questions on migration status, which provide information on whether or not the individual moved in the past year, whether that move was within state or across states, and if so, which state they moved from.

2 Methodology

If occupational licensing is an actual barrier to interstate migration, interstate migration rates for individuals in these five occupations should be lower than that of individuals in other occupations, while the rate at which they moved within a state (intrastate migration) should be similar to others not in that occupation. To establish whether or not this is true, we estimate OLS regression models of migration rates, with our key explanatory variable being an indicator for whether or not an individual is in one of the five occupations listed above. We run these models separately for each of the five occupations. To control for observable differences between those in our chosen occupations and others, we use a form of propensity score matching called cell matching. We form cells matching on sex, education level, race, citizenship status, employment status, marital status, number of own children in household, and income level. In addition, we limit our sample to those individuals with an appropriate level of education, which is a college degree or above for dentists and lawyers, some college or above for nurses and teachers, and less than a college degree for barbers and hairdressers. While this methodology does not allow us to make any causal claims on the effect of occupational licensing on migration, it does allow us to see whether or not interstate migration rates are lower for those in licensed occupations compared to their peers in other occupations.

In order to establish whether or not occupational licensing has a causal effect on interstate migration, we plan to use a difference-in-difference strategy, using changes in occupational

licensing laws as our source of exogenous variation. We are currently in the process of collecting data on changes in occupational licensing statutes that occurred during our time period of analysis for our five occupations, including when the changes occurred, which states they affected, and whether or not they were increases or decreases in the stringency of licensing requirements.

3 Preliminary Results

As mentioned above, our cell matching analysis will not allow us to make any causal statements on the effect of occupational licensing on interstate migration, but they do control for observable differences in characteristics that could affect migration rates. If occupational licensing restricts movements between states for those in licensed occupations, our results should show that those in these occupations have lower interstate migration rates than their peers in other occupations, while their intrastate migration rates should be similar. For three of the five occupations, this is exactly what we find. Lawyers move between states at a rate 25% lower than those with similar characteristics in other occupations, while the rate they move within state is only 7% lower than non-lawyers. Similarly, barbers and hairdressers are 27% less likely to move between states but only 7% less likely to move within state than their peers in other occupations. This difference is even larger for teachers, as they move between states at a 43% lower rate than non-teachers, and within states their migration rates are only 7% lower. The regression coefficient for dentists in the interstate migration regression is negative, although statistically insignificant. The only occupation providing results contrary to our hypothesis is nurses, who have intra- and interstate migration rates 2% and 11% *higher*, respectively, than their peers. While this makes it appear that occupational licensing was not a barrier to migration of nurses, the time period we consider is when the so-called "nursing shortage" was most acute in the United States, which could potentially account for the fact that nurses were moving at a higher rate than others. We plan to further investigate this possibility.

4 Next Steps

While our results from our propensity score matching models seem to indicate that occupational licensing does present a barrier to interstate migration, they do not allow us to establish that this relationship is causal. In order to do so, we will use a difference-in-difference strategy using changes in state occupational licensing laws. If occupational licensing does have

a causal impact on interstate migration, these results should show that making licensing laws more restrictive in terms of reciprocity and endorsement with other states should result in a decrease in interstate migration rates between the affected states, and loosening such requirements should increase interstate migration. Using this strategy will allow us to determine to what extent increases in occupational licensing in the United States are responsible for the recent decrease in interstate migration.