

## IX. Regulating Occupations

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# Taking Too Much Off the Top? The Effects of State Licensing on Barbers' Earnings

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### Abstract

Existing studies find little evidence that licensing has increased barber earnings. In this paper we measure the effect of licensing on barber earnings using recent microlevel data from the 2000 U.S. Census, as well as several new measures of the strictness of state licensing of barbers. Our results suggest that certain licensing provisions may have increased the earnings of barbers by as much as 26 percent. The magnitude of our estimates is somewhat higher than those found in studies examining the effects of licensing in similar professions.

### Introduction

A renewed interest in examining the effects of occupational licensing has emerged in the economics literature in recent years (Kleiner 2006). Economic theory suggests that licensing of a particular occupation should increase the earnings of practitioners by raising the cost of training or limiting entry into the profession. For the case of barbering, however, there is very little evidence

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that licensing has affected either the number of barbers or their earnings (Thornton and Weintraub 1979; Kleiner 2000). In this study, we re-examine the effects of state licensing on the earnings of barbers using recent microlevel data from the 2000 U.S. Census.

### **Origins and Provisions of Barber Licensing Laws**

The origins of barber licensing and barber unionism are closely interconnected. The Journeyman Barbers' International Union of America was formed in 1887, at a time when the barbering profession was in what one historian (Hall 1936, 61) describes as a "sorry state"—unsanitary shops, poor training, "ruinous price cutting," and barber training schools that were rapidly turning out large numbers of incompetent barbers. As Friedman (1965) puts it, conventional union tactics were effective in such circumstances (505) and licensing held out more promise. As a result licensing laws were pushed by (and sometimes provisions were even drafted by) the barbers' union. The state courts did not generally overturn such legislation, mainly because such laws were advanced on the premise that they protected the public health, safety, and welfare. Friedman (1965, 519) cites a court decision upholding the 1897 Minnesota statute (the nation's first) in which it is argued that people needed "protection from diseases spread from barber shops" run by "unclean and incompetent barbers" (*State v. Zeno*, 79 Minn. 80, 81 N.W. 748 [1900]).

All states except Alabama currently have state barber licensing laws, but qualifications for licensure vary significantly across states. States generally require an applicant to have graduated from a state-approved barber school and passed practical and written licensing examinations. Eighteen states and the District of Columbia allow licensee applicants to complete an apprenticeship program in place of barber school. Nine states require that barbers both graduate from barber school and complete an apprenticeship.

The typical barber school curriculum includes classroom study as well as on-the-job training. Courses of study always include training in the primary tasks of the profession (for example, haircutting, shaving, and sterilization of grooming devices). Most states also require that barber schools teach human anatomy, symptomatology of diseases of the scalp and skin, and facial and scalp massage. Business management, ethics, basic accounting, and chemistry are a required part of the curriculum of barber schools in some states. Generally, state laws also specify the number of hours of instruction required for barber students to graduate. In 2000 requirements range from 1,000 clock hours in Missouri to 2,100 clock hours in Nebraska and Iowa.

After the completion of classroom work, most schools require students to perform barbering services in on-campus salons. If apprenticeship programs are required by a state in addition to barber school graduation, they serve as

an additional barrier to entry into the barbering profession. On the other hand, if apprenticeship programs can be substituted for barber school training, they serve as a usually far less costly means of acquiring a license. A change to the Louisiana barbering law in the mid-1990s provides striking evidence of this difference in costs. In 1996 Louisiana revised its barbering statute to allow barber license applicants to complete an apprenticeship program in place of formal barber school training. As a result of the change, the number of licensed barbers in Louisiana nearly doubled—from 2,600 in 1991 to approximately 5,000 in 2005 (Guarisco 2005). In general, however, barber apprenticeship programs are beginning to disappear. Among states that offer (or require) an apprenticeship program, the mean length of the required apprenticeship period is approximately 2,924 clock hours.

In addition to training requirements, most states have minimum education requirements for barbers. In 2000 nine states required that barbers graduate from high school or obtain an equivalent certification (GED), while many others require the completion of at least the tenth grade. The majority of states require that applicants be of “good moral character,” and a few laws require that applicants be free of infectious diseases and possess “temperate habits.” Connecticut, Mississippi, Oklahoma, and the District of Columbia all require that applicants can speak and read English.

Six states issue “barber assistant” (or “barber technologist”) licenses. Holders of these licenses are allowed to perform a more limited set of tasks than licensed barbers. In Arkansas, South Carolina, Tennessee, and Texas barber assistants are authorized to shampoo hair under the supervision of a licensed barber; they are never permitted to shave or cut hair. In Florida and Idaho barber assistants may cut hair under the supervision of a licensed barber, but they are never authorized to perform other jobs (coloring hair, for example).

A final characteristic of state barbering laws that deserves attention is reciprocity provisions. As of the year 2000, all but nine states had some kind of reciprocity provision. A reciprocity provision allows a barber licensed in another state to obtain a license in the reciprocity-granting state without taking a licensing examination. Reciprocity is typically conditional upon whether or not the licensing restrictions of the other state are comparable.

### **Prior Research on the Effects of Licensing in the Barbering Profession**

There have been very few prior studies that have estimated the effects of licensing upon the wages of barbers. Thornton and Weintraub’s (1979) paper is the only study that performed a state-level investigation of the economic effects of barber licensing. They were unable to find evidence that licensing has decreased the number of barbers. The absence of earnings data precluded

them from examining the effects of licensing on barber earnings, but they deduced that the effect was probably very small. Kleiner (2000) examined the impact of licensure upon barbers' wages on the *national* level by comparing barber wages to wages in occupations with similar educational requirements that do not require licensing (bartenders and welfare service aides). He also was unable to find evidence that licensing increases the earnings of barbers. A more recent paper by Adams, Ekelund, and Jackson (2002) examined the effects of licensing in the closely related cosmetologist profession. They estimated that stricter licensing provisions may have increased the price of cosmetology services by as much as 19 percent.

### Basic Model

To estimate the effect that licensing requirements have upon barber earnings for the year 2000, we utilize a human capital earnings function:

$$(1) \ln(\text{annual earnings}) = \alpha + \beta_1(\text{age}) + \beta_2(\text{age}^2) + \beta_3(h) + \beta_4(V) + \sum_{j=1}^3 \theta_j X_j + \sum_{i=1}^k \lambda_i Y_i + \varepsilon$$

where the  $h$  variable is the number of hours worked per week,  $V$  is a vector of variables measuring the strictness of licensing legislation,  $X_j$  is three census-region dummy variables, and  $Y_i$  is one individual characteristic dummy variables (for example, gender, marital status, and race).<sup>1</sup>

We measure  $V$  using a number of state licensing provisions. First, we use the number of barber school training clock hours required. If a state requires more barber school clock hours, applicants will incur a higher cost to obtain a license. Therefore, the coefficient on barber school training clock hours should be positive. Second, as stated earlier, some states require applicants to graduate from barber school and to complete apprenticeships. Other states allow apprenticeships to take the place of formal barber school in the licensing process. We thus construct two separate dummy variables—the first equal to 1 if a state requires an apprenticeship and the second equal to 1 if a state accepts an apprenticeship in place of barber school training. We argue that the coefficient on the first dummy variable should be positive. If a state requires an apprenticeship in addition to barber school training, this will create an additional cost of obtaining a barber license. The second dummy variable coefficient should have a negative sign, however. If a state accepts an apprenticeship in lieu of barber school training, this will allow more applicants to complete the barber licensing process.

In addition to specific barber training requirements, we use four more dummy variables for other licensing provisions that have the potential to make it difficult to enter the barbering profession. We employ a dummy variable equal

to 1 if a state requires licensure applicants to possess a high school diploma (or its equivalent). We also use a dummy variable equal to 1 if a state requires English language proficiency as a condition for obtaining a barber license. We use a third dummy variable (equal to 1) if a state does not have a reciprocity provision for barbers licensed in another state who wish to practice in the state in question. We construct yet another dummy variable (equal to 1) if a state *does not* have a provision for a barber assistant license. Without such a provision, there will be fewer practitioners providing the services associated with barbering. If members of the barber licensing board act in their own self-interest, they should oppose barber assistant licenses.

Finally, we use the composition of the state's licensing board as a further measure of the strictness of a state's licensing statute. In recent years the distinction between barbers and cosmetologists has begun to disappear. Today, the only major difference in most states is that cosmetologists are not permitted to shave facial hair. And in two states—New Jersey and Utah—cosmetologists and barbers are treated exactly the same according to the law; these states do not issue two distinct licenses. As an additional measure of the ability of the board to influence licensing requirements, therefore, we use a dummy variable (equal to 1) if the barber licensing board is merged with the cosmetology licensing board of a state. The expected sign of the coefficient of this dummy variable is uncertain. If the merging of the cosmetology and barbering licensing boards blurs the distinction between the two professions and results in a larger number of practitioners overall, it may result in a decrease in barber earnings. On the other hand, the merging of the two boards may create a more powerful voice in favor of limiting entry into both professions. In this case, the coefficient of the dummy variable would be negative.

## Data and Model Estimation

We use wage data for barbers from the Census 2000: 5 Percent Public Use Microdata Series (Ruggles et al. 2004). The data set includes information on age, sex, race, gender, Hispanic origin, and marital status. We construct another dummy variable equal to 1 if barbers are self-employed to control for any inherent differences between wage earners and the self-employed.<sup>2</sup>

To measure the effect of licensing on barber earnings, we estimate equation (1) using OLS.<sup>3</sup> All standard errors have been adjusted for state-level heteroskedasticity because error terms for observations from the same state are likely to be related (Moulton 1990). In part A of Table 1, we show the results (coefficients of the licensing variables only) of running separate regressions for each of the licensing variables. Most of the licensing variable coefficients have the expected signs. The no reciprocity and high school graduation requirement dummies each have negative coefficients, but they are both statistically

TABLE 1  
OLS Estimates of the Impact of Licensing Upon Barber Earnings

Part A: Licensing Variables Each Run Separately			
Variable	Coefficient	Variable	Coefficient
Class Training Hours	0.0001 (0.0001)	Apprenticeship Replacement	0.0056 (0.0534)
English Requirement	0.2146 (0.1430)	No Reciprocity	-0.0800 (0.0638)
Merged Boards	0.0677 (0.0609)	High School Graduation Requirement	-0.0504 (0.0617)
Apprenticeship Required	0.2281*** (0.0416)	No Barber Assistant License	0.2110*** (0.0624)
Part B: All Licensing Variables Run Simultaneously			
Variable	Coefficient	Variable	Coefficient
Class Training Hours	0.00008° (0.00004)	Apprenticeship Replacement	-0.01059 (0.04071)
English Requirement	0.19675° (0.11517)	No Reciprocity	-0.07558° (0.03817)
Merged Boards	0.06839 (0.04983)	High School Graduation Requirement	-0.08817 (0.05287)
Apprenticeship Required	0.22762*** (0.03854)	No Barber Assistant License	0.13745** (0.05308)

*Note:* Dependent variable is the natural logarithm of earnings. Control variables include age, age<sup>2</sup>, gender dummy, race dummies, marital status, Hispanic origin dummy, weekly hours worked, self-employed dummy, and census region dummies. Standard errors in parentheses are adjusted for heteroskedasticity resulting from observations from the same state (Moulton 1990). All data except licensing variables are from 2000 5 Percent U.S. Census Public Use Microdata Series (Ruggles et al. 2004). Licensing variables are compiled from reading the barber licensing statute of each individual state. Data were confirmed by contacting the licensing board of each state.

° significant at 10 percent level °° significant at 5 percent level °°° significant at 1 percent level

insignificant. Two of the licensing variable coefficients (the apprenticeship requirement and the barber assistant dummies) are rather large, positive, and statistically significant. They suggest that barbers working in states requiring apprenticeships earn 25.6 percent more than barbers working in states not requiring apprenticeships.<sup>4</sup> States that require the completion of an apprenticeship program in addition to formal barber school training effectively double the amount of time that aspiring barbers must spend in acquiring a license. We also find that barbers working in states without a provision for barber assistant licenses earn 23.5 percent more than barbers working in states where such licenses are granted.

In part B of Table 1 we have re-estimated equation (1) with all of the licensing variables included simultaneously. The coefficient on the apprenticeship requirement dummy variable is virtually unchanged. Our estimate of the earnings effect of the absence of a barber assistant (technician) license provision is still positive and statistically significant but somewhat smaller (14.7 percent). There is also some evidence that more class training hours and English proficiency requirements are associated with higher barber earnings. Requiring barbers to have proficiency in English can have the effect of substantially limiting entry from the growing Hispanic population.

## Conclusion

Our results suggest that barbers earn more (about 26 percent) if they work in a state that requires an apprenticeship in addition to formal barber school training or if they work in a state that does not offer a barber assistant license (earnings are 14–23 percent higher). The general magnitude of these results is comparable to the effects estimated by Adams, Ekelund, and Jackson (2002) for cosmetologists. We also find some evidence that English language requirements are associated with higher barber earnings, and we suspect that such requirements may be of greater importance in the future as the Hispanic population in the United States continues to grow.

A few final observations are in order. Today there exist a number of substitutes for barber services—those rendered by cosmetologists, hairstylists, even home haircut kits—as well as a variety of places in which such services are rendered, such as barbershops, beauty salons (parlors), unisex salons, and the kitchen at home. One might argue, therefore, that licensing would seem to possess very little potential for substantially affecting the earnings of barbers. With the higher prices for barber services that licensing might generate, won't people simply switch to lower-priced alternatives? Perhaps, but this line of argument overlooks the fact that the clientele of most barbershops is still exclusively male and that of beauty salons still mostly female (Lawson 1999). This gender division implies that the (price and wage) elasticity of the demand for barbers may still be relatively low, thereby providing the potential for licensing restrictions to create rents for barbers. With the male clientele of unisex salons growing in recent years, however, this potential may not persist much longer into the future.

## Notes

1. We also performed regressions where we imputed an hourly wage using the number of hours each barber worked per week. Our results were very similar and are available from the authors upon request.

2. We performed Chow tests to see if there was any evidence that the coefficients on

the licensing variables were different for self-employed and wage earning barbers. The results of the test led us to not reject the null hypothesis that the coefficients were the same for both groups.

3. There is a possibility that our OLS results are biased as a result of endogeneity. However, several studies have found that the OLS estimates of the effects of licensing on wages seem biased *downwards* (see, for example, Timmons and Thornton, forthcoming). As a result, we feel that if there is an endogeneity bias, our OLS results are at worst a plausible lower bound for the effects of licensing on barber wages.

4. All coefficient estimates are converted to percentage differences using the transformation  $e^{\beta} - 1$ .

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