

Here, There, and Back Again: The Licensing, De-licensing, and

Re-licensing of Barbers in Alabama

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Abstract

The economic effects of occupational licensing remains an understudied topic, but even less is known about the effects of the removal of licensing legislation. In this paper we take advantage of a natural experiment that occurred in the state of Alabama. Alabama was the last state to begin licensing barbers in 1973 and also the only state to de-license barbers in 1983. Since that time, several efforts have been made to re-license the occupation—most recently with a barber licensing bill that became law in September 2013. Relying on data from 1974 to 1994, we find that barber de-licensing has reduced the average annual earnings of barbers as well as the number of cosmetologist employees per million residents in Alabama. Taken together, our results suggest that licensing had been restricting competition in the market for hair-cutting services in Alabama.

Here, There, and Back Again: The Licensing, De-licensing, and Re-licensing of Barbers in Alabama

Edward Timmons and Robert J. Thornton¹

Introduction

Occupational licensing continues to grow as a labor market institution both in the US and abroad. The most recent national estimate of the proportion of the U.S. labor force directly affected by occupational licensing is 29% (Kleiner and Krueger, 2013), and licensing's growth has become a national concern. For example, a white paper published by the White House in the summer of 2015 recommends that state policy makers should reconsider the costs and benefits of occupational licensing, inasmuch as licensing can substantially reduce total employment in licensed occupations. (Department of the Treasury, 2015). Although much is still to be learned regarding the economic effects of occupational licensing, even less is known about the economic effects of the removal of such licensing—what we shall refer to as “de-licensing.” One reason for this lack of knowledge is the relative infrequency of successful de-licensing efforts. While more and more occupations have become licensed as of late (for example, fire eaters and pet groomers), in a recent paper we were able to uncover only eight cases of de-licensing in the U.S. in the last 40 years (Thornton and Timmons, 2015). In this paper we examine one of the cases identified: barbers in Alabama.

Until 1973 Alabama was the only state that did not license barbers. In that year a statewide barber licensing law took effect and lasted for the next 10 years. After the law expired in 1983, Alabama barbers were again free to practice their trade with few restrictions. We rely on

¹ St. Francis University and Lehigh University respectively.

this unique natural experiment to estimate the economic effects of de-licensing of barbers in Alabama.

We first compare barbers' earnings, the number of barbers, and the number of barber shops in Alabama with the corresponding numbers in other Southern states during the period 10 years before and 10 years after Alabama's de-licensing took effect. We also compare how barber de-licensing may have affected the earnings and numbers of a closely related service profession—cosmetologists.

We then try to ascertain what would have happened to the barbering and cosmetology markets in Alabama had de-licensing *not* taken place in 1983. To do so we utilize the synthetic control method (Synth) originally introduced by Abadie and Gardeazabal (2003) and later expanded by Abadie et al. (2010). This estimation strategy prevents contamination of the results from time-varying unobserved heterogeneity across states. For this purpose we construct a “synthetic Alabama,” with Synth picking nonnegative weights to attach to control states so that “synthetic Alabama” resembles actual Alabama as closely as possible prior to the start of de-licensing in 1983. The synthetic control method has been used in several other labor market contexts: for example, estimating the effect of right-to-work laws (Eren and Ozbeklik 2016) and of comparable worth (pay equity) legislation (McDonald and Thornton 2015.)

Finally, it is important to note that seven Alabama counties continued to license barbers even after mandatory statewide barber licensing ended in 1983. We therefore try to ascertain to what extent the continued licensing of barbers in these counties may have affected our estimates. We also compare barber earnings in counties that continued to license barbers vs. those that did not.

We should stress that ours is the first study to estimate the economic effects of the de-licensing of any occupation in the U.S. Moreover, it is also the first to utilize the synthetic control method to estimate the effects of occupational de-licensing. For the most part, we utilize

state-level panel data obtained from *County Business Patterns* reports from the US Census Bureau for the years 1974 to 1994. Before turning to our empirical results, we provide a brief summary of the existing literature on licensing effects, as well as some background on barber and cosmetologist licensing in Alabama.

Licensing's Economic Effects

The economic effects of occupational licensing have been examined in a number of previous studies. Generally, most authors find evidence that licensing increases the earnings of licensed professionals. These results have been found when comparing states with varying degrees of strictness in licensing statutes (Kleiner and Kudrle, 2000; Timmons and Thornton, 2008; Pagliero, 2010), when comparing the earnings of licensed and unlicensed professions (Kleiner, 2000; Kleiner and Krueger, 2010), and when comparing wages in states before and after the passage of licensing regulation (Thornton and Timmons, 2013). Economic theory suggests that licensing could increase earnings in a number of ways, such as by restricting entry into the profession and hence reducing the number of practitioners (Friedman, 1962 and Stigler, 1971), through increasing the human capital of practitioners (Shapiro, 1986), or by serving as a signal to the consumer of the quality of the service (Leland, 1979; Shapiro, 1986).

The economic effects of the licensing of barbers and cosmetologists in particular have also been the subject of a few studies. Thornton and Weintraub (1979) found little evidence that stricter licensing regulations affected the number of practicing barbers over the period studied (1969-73), and Kleiner (2000) was unable to find a difference between the earnings of barbers and those of bartenders or welfare service aides—two unlicensed occupations with similar training requirements. In a more recent study, however, Timmons and Thornton (2010) present evidence that stricter barber licensing is now associated with higher barber pay (11- 22%) and a

smaller number of practicing barbers. Adams et al. (2002) also found evidence that stricter cosmetology licensing was associated with higher prices (19%) for cosmetology services.

What is less well understood for both barbers and for licensed occupations generally are the effects of de-licensing -- the elimination of an existing licensing statute and its requirements. Compared to licensing, are the effects of de-licensing reversed? That is, does de-licensing lead to an increase in the number of practitioners along with a decline in relative wages? And what about the speed of the adjustments?² There is suspicion that the effects of de-licensing should be more rapid than the effects of licensing, a major reason being that the onset of licensing usually brings about the “grandfathering” of existing practitioners. In other words, existing practitioners may not need to possess the same requirements (e.g. training and education) that new entrants to the profession or trade are now expected to have. This means that the reduction in the number of practitioners and the consequent rise in earnings associated with licensing might occur with a substantial time lag.

Barbers and Cosmetologists in Alabama

Alabama provides a unique opportunity to investigate such effects in the special case of barbers. Alabama was the last state in the United States to license barbers when it did so in 1973. It has also been the only state (since as far back as the 1930's, at least) to abolish barber licensing when sunset legislation terminated the state's barber licensing board at the end of 1982.³ De-licensing came about after allegations of mishandling of barber board funds and other improprieties led the Alabama legislature to remove funding for the barber board (Stokes,

² Han and Kleiner (2015) estimate that it may take at least 10 years for the full wage effects of licensing to be realized.

³ Interestingly, in the early years of barber licensing, there were several successful state attempts to de-license barbering. Hall (1936) points out that Nebraska, California, Kentucky, and Kansas all repealed their barber licensing laws only to later reenact them. He also points out that New York passed a barber law in 1903 but repealed it in 1906. (Hall 1936, pp. 79-80)

2011).⁴ Since 1983, a number of attempts have been made to re-license barbers in Alabama. For example, in 2000 a bill to recreate the state barbering board was proposed, but the bill ultimately failed. More recently, a bill (HB184) to change the existing “Board of Cosmetologists” to the “Board of Barbering and Cosmetology,” thereby effectively re-licensing barbers, was passed into law in 2013. The new law requires prospective barbers to complete either 1,000 hours of training or 2,000 hours of apprenticeship to obtain a license. The law also contains a grandfathering provision for current barbers, so long as these barbers pay an initial fee of \$15 and subsequent fees of \$80 every two years.

A key player in pushing for the re-establishment of barber re-licensing was the Alabama state Board of Cosmetology. But why would the Alabama Board of Cosmetology be one of the primary proponents of licensing barbers? The answer can be found by examining the history of cosmetology licensing in Alabama. In contrast to barber licensing, the licensing of cosmetologists in Alabama has been longstanding. It began at the county level as early as 1946 in Jefferson County. Later, the Alabama Board of Cosmetology was created in 1961, and since that time all Alabama cosmetologists have been required to be licensed. It is important to note that requirements for cosmetologist licensing are especially stringent, with aspiring cosmetologists having to complete 3,000 hours of training in addition to being subject to periodic re-licensing and continuing education requirements.

The services provided by cosmetologists and by barbers are increasingly likely to serve as substitutes nowadays. Traditionally, of course, most women visited cosmetologists for haircutting services while most men visited barbers; but the gender stratification in the market

⁴ The chain of events leading to barber de-licensing was as follows. In 1981 Alabama passed sunset legislation that called for the automatic termination of several dozen state agencies unless subsequent legislation was passed providing for the continuation, modification, or re-establishment of each agency. The sunset legislation set October 1, 1982, as the termination date for Alabama’s Board of Barber Examiners. No bill extending the life of the Board was passed, so the board was automatically terminated by the provisions of the sunset statute.

has weakened over time. Today, the only remaining distinction between services provided by the two professions in Alabama is that of nail services—cosmetologists can manicure and paint nails, whereas it is illegal for barbers to do so. By imposing licensing requirements on barbers, economic theory would suggest that barber earnings (and the price of haircuts) would increase through a reduction in the supply of barbers. The economic motivation for the strong cosmetologist support of re-licensing barbers in Alabama should now be clear. By subjecting barbers to licensing requirements, cosmetologists would be ensuring that an increasingly close substitute for haircutting services, namely barbers, would no longer be as numerous nor as inexpensive. In the sections that follow we will attempt to provide further empirical support for this assertion.⁵

Empirical Strategy and Data

Again, the state of Alabama presents a unique natural experiment to observe the effects de-licensing, being the only state to have so far successfully de-licensed the barbering profession.⁶ However, de-licensing in Alabama was not universal. Even before the start of mandatory statewide licensing in 1973 and after its elimination in 1983, a handful of Alabama counties had enacted their own barber licensing regulations.⁷

⁵ It could also be argued that the imposition of licensing requirements on barbers might conceivably raise the quality of barber services (i.e., increase the human capital of barbers) and serve as a signal to consumers that barbers are now providing a higher quality service. However, it is hard to imagine why cosmetologists would find either reason to be a motive for pushing for the imposition of barber licensing.

⁶ Hawaii, Michigan, and Texas are among a few states that have filed sunset reports recommending the de-licensing of barbers or the elimination of barber licensing boards, but no further action has been taken by state legislators.

⁷ Data on county-level licensing have been very difficult to obtain, but we were able to gather some details by conducting phone interviews with representatives from county barber boards. In addition to providing the authors with information on county-level licensing restrictions, the representatives also told many colorful stories. One representative recalled the “good old days” of barber licensing when armed members of the state barber board would inspect barber shops and generally enforced better standards in the profession. Even today, enforcement of barber licensing law can also sometimes be quite dramatic. In 2010, for example, authorities in the Orlando, Florida, area conducted “sweeps” of nine barbershops and arrested and charged 37 individuals with the misdemeanor crime of “barbering without a license” (Weiner, 2010).

For our analysis, we rely largely upon state-level data obtained from *County Business Patterns* (CBP) from 1974 to 1994, roughly ten years before and ten years after the elimination of licensing. The data contain information on the total number of employees, total payroll, and the total number of barber shops as well as similar information for beauty shops.⁸ Because our data on the number of barber shop employees do not include sole proprietors and because many barber shops are “one man operations” run by the owner, we thought it necessary to examine both barber shop employees and the number of barber shops. To estimate average earnings for employees working at barber shops, we divided total payroll by the number of employees, and converted this figure into real (1994) dollars using the CPI. We then did the same to estimate average earnings of employees in beauty (cosmetology) shops. We obtained these data for Alabama and then for all other Southern states over the period (Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia.) We used the other eleven Southern states to form a control group for our estimation of the effects of de-licensing.

Barber Earnings and Numbers: Raw Trends, Pre-and Post-De-licensing

In Figures 1 and 2 we have plotted average annual employee earnings, the number of employees per million residents, and the number of shops per million residents first for barber shops (Figure 1) and then for beauty shops (Figure 2). Alabama is the solid line in each graph, and the dashed line is the corresponding average of all other Southern states. Referring to Figure 1, first of all, it is clear from the top panel (A) that the gap between average real barber earnings in Alabama and in other Southern states increased after barbers were de-licensed in 1983. (See

⁸ A handful (fewer than 10) of observations were absent from each panel of employment and payroll for barber shops and beauty shops. We used a simple linear trend to fill in the missing observations.

also Table 1, panel A.) Specifically, during the ten-year period of barber licensing, Alabama barbers earned on average about 90% of what barbers in the other Southern states earned. However, in the ten-year period following de-licensing, barbers in Alabama earned on average only about 83% of what their counterparts in the other Southern states earned, a drop of nearly 8%. This is exactly what would be expected if de-licensing enabled more individuals to enter the barbering profession while driving down relative barber earnings. But have barber numbers increased?

The middle panel (B) of Figure 1 shows that the number of employees in barbershops (per million residents) declined both in Alabama and in all other Southern states over the period studied. This is not surprising, since the period was one of a marked decline in barber employment nationally due in large part to the increasing popularity of longer hair.⁹ Surprisingly, the barber-population (Emp/Pop) ratio was higher in Alabama before de-licensing in 1983, although the gap declined noticeably after 1980. After 1983, however, the Emp/Pop ratios for Alabama and for other Southern states become virtually indistinguishable. In other words, de-licensing is associated with a reduction in the rate of absolute decline in the number of employed barbers in Alabama.¹⁰ More detailed information is provided in Table 1, panel B.

Finally, in the bottom panel (C) of Figure 1, we have presented data on the number of barber shops per million residents (Shop/Pop.) Why analyze the number of barber shops? The reason is that over this period (and still true today) well more than half of all practicing barbers were self-employed; as a consequence their numbers are not reflected in the Emp/Pop ratios. In

⁹ Interestingly, the Department of Labor (DOL) greatly underestimated the decline in employment of barbers in its projections over much of this period. In the 1991 *Occupational Outlook Handbook*, for example, the DOL employment projection for barbers over the period 1988-2000 was that there would be no change. In fact, however, the number of barbers employed fell by nearly 32% over these years. (See "The 1988-2000 Employment Projections: How accurate were they?" by Andrew Alpert and Jill Auyer, *Occupational Outlook Quarterly*, Spring 2003.)

¹⁰ Simple regressions for Emp/Pop were run for each of the two sub-periods with time as the independent variable. The coefficient for time (average annual change) in Emp/Pop was -3.9 for the period 1974-82, but fell to -3.3 for 1983-94.

Figure 1 (C), we can see a marked decline in the number of barber shops per million residents (Shop/Pop) in both Alabama and in all other Southern states over the years analyzed. And as with Figure 1 (B), the Alabama ratio was again higher during the period of barber licensing from 1974-83. But the gap between the Alabama Shop/Pop ratio and that of the other states began to decline after de-licensing and disappeared entirely by the early 1990s. In other words, de-licensing was associated with a reduction in the rate of absolute decline in the number of barber shops in Alabama¹¹

We can summarize what we have found in the following way. Both the number of employed barbers and the number of barber shops relative to the population declined over this time period. This was true in Alabama as well as in its neighboring Southern states. Since the number of barber employees and barber shops in any year is the result of inflows (in part the result of de-licensing) and outflows (a reflection of both retirements and the fact that barbering has been a declining occupation), what we have found is that de-licensing seems to have increased inflows to the barbering profession, though not by enough to offset outflows.

Figure 2 and Table 1 (panels D through F) provide some comparisons of cosmetologist earnings and numbers for comparisons with those of barbers.¹² Why examine cosmetologists? Yet another reason for the decline in barber numbers nationally in recent decades has been the shifting preferences of many American men away from barber shops and towards cosmetology and unisex shops, brought about by the growing popularity of hairstyling. This demand shift should manifest itself (*ceteris paribus*) in increases in cosmetologist numbers and earnings. On the other hand, to the extent that barber de-licensing in Alabama resulted in an increase in barber

¹¹ Simple regressions were also run for Shop/Pop for each of the two sub-periods, again with time as the independent variable. The coefficient was -3.2 for 1974-82 but -1.8 for 1983-94. In other words, de-licensing was associated with a reduction of almost 50% in the rate of absolute decline in the number of barber shops.

¹² There are many more beauty shops and employees working in beauty shops than there are barbers.

numbers and a decline in barber pay (as reflected in lower prices of haircuts), we would expect to observe a decline in Alabama cosmetologist numbers and earnings (again, *ceteris paribus*.)

What do we see? For the most part, earnings of cosmetologists (Figure 2, panel (A)) and the number of beauty shops in Alabama (panel (C)) follow the same general trend as in other Southern states. There seem to be no detectable effects of de-licensing on cosmetologist earnings or on the relative number of beauty shops. However, panel (B) of Figure 2 shows that the number of cosmetologists employed (per million) in Alabama beauty shops was higher than in other Southern states prior to de-licensing and then more closely follows the pattern in other states after de-licensing takes effect. And in the last few years of our sample, the number of cosmetologist employees is smaller in Alabama than in other Southern states.¹³ This difference is also noticeable in Table 1, panel (E)—the number of cosmetologist employees fell in Alabama, but increased slightly in other Southern states (a difference of about 91 employees per million residents). These patterns, of course, are consistent with the premise that barber de-licensing in Alabama has resulted in barbers becoming closer substitutes for cosmetologist haircutting services in Alabama—at least with respect to their numbers. Although the number of cosmetology employees rose after barber de-licensing in 1983, the rise was less than it would have been had barbers not become closer substitutes.

Although informative, the data that we have analyzed so far fail to control for time-varying state level changes that may be clouding the true net effect of de-licensing on barber earnings and barber numbers. In the next section, we present estimates of the effects of de-licensing of barbers in Alabama on both the barber and the cosmetologist markets using the synthetic control method.

¹³ Regressing the Alabama EMP/POP ratio on time shows an average annual decline of 31.3 cosmetologists per million from 1974-82. For the period 1983-94, however, the average annual increase is 2.4 per million.

Estimates of De-licensing Effects Using the Synthetic Control Method

Synthetic-control methods (Synth) provide researchers with a technique that aids in the design and implementation of studies attempting to assess the effects of policy interventions. In this case, what we are trying to ascertain is what would have happened to the barbering and cosmetology markets in Alabama had de-licensing *not* taken place in 1983. To do so we construct a “synthetic Alabama,” with Synth picking nonnegative weights to attach to control states so that “synthetic Alabama” resembles actual Alabama as closely as possible with respect to several important time-series variables prior to the start of de-licensing in 1983.

For this purpose, we use a panel of state-level data from 1974 to 1994 from Alabama and the additional 11 states (noted in the preceding section) belonging to the Southern Census Region. In each estimation, we use the state unemployment rate, the urbanization rate, real personal income per capita, and lagged values for the dependent variable from 1975 and 1980 as predictor variables. We utilize STATA for our estimations and use the “nested” option to further minimize root mean square prediction error.

Figure 3 contains graphs comparing Alabama with its synthetic counterpart (should we call it “Synthabama”?) Weights for individual Southern states are noted immediately below each figure. In the first graph (panel A) of Figure 3, we focus on the effect of de-licensing on average annual barber shop employee pay. Actual barber pay in Alabama seems to follow a different trend relative to that in “synthetic” Alabama. Generally, the annual pay of Alabama barbers is lower (more than \$1,000 per year in most years) in the period following de-licensing than would have been the case in “synthetic” Alabama. This is precisely what we would expect to be the case if de-licensing resulted in increased barber numbers. The evidence in Figures 3B and 3C, however, is less clear-cut. Here it can be seen that the actual number of barber employees in Alabama rises immediately after de-licensing takes place and for 1984 slightly exceeds that of

Synthabama (73.4 vs. 72.1). Furthermore, the actual number of barber shops per million residents in Alabama becomes higher than what Synthabama would predict (31.1 in Alabama vs. 28.8 in Synthabama.) However, for most years after 1985 Alabama barber numbers are slightly lower than what Synth would predict while the number of barber shops in Alabama does not differ noticeably from those in Synthabama after 1985.

Turning to examine the effects of barber de-licensing on the market for cosmetologists in Alabama (Figure 3, panels D through F), we see little evidence that either average cosmetologist earnings (D) or the number of cosmetologist (beauty) shops (F) were affected. However, there is clear evidence in panel E that the difference between the estimated cosmetologist-population ratio in Synthabama and that which actually occurred was substantial and increasing in magnitude after barber de-licensing took place in 1983. In other words, the occurrence of barber de-licensing was associated with a substantial reduction in the number of cosmetologist employees working in Alabama. This suggests that increased competition from barbers may have resulted in a reduction in demand, along with fewer employment opportunities, for cosmetologists. This finding is quite consistent with the previously noted strong lobbying on the part of cosmetologist associations in Alabama to re-license barbers, which became a *fait accompli* in 2013.

To further test the validity of our results using the synthetic control method, we performed placebo tests for our main findings—namely, that barber de-licensing seems to have reduced the annual earnings of barbers as well as the number of cosmetologist employees in Alabama. To perform the tests, we first calculated a similar synthetic control estimate for each southern state (e.g., we set Arkansas as the treatment state and all other southern states as the control). We then computed the gap between actual barber wages (and the number of cosmetologist employees per million residents) vs. the synthetic counterpart of each. We have

plotted each of these in Figure 4. Here it can be seen that the gaps are smaller, and in most cases even negative, for Alabama. In other words, the actual values for Alabama are smaller than the synth values, while for other states the actual values tend to be larger than the synth values. This is generally the case both for barber earnings and for cosmetologist employee numbers. If our results using the Synth method were a result of other conflating factors, we would expect to see many more Southern (placebo) states with negative barber wage and cosmetologist employment gaps. This result supports our hypothesis that barber de-licensing was largely responsible for the decline in barber wages and cosmetologist employee numbers in Alabama.

County Heterogeneity in Licensing Requirements

As we noted earlier, the back-and-forth history of barber licensing in Alabama has not been uniform across counties. Interestingly, five counties (Jefferson, Madison, Mobile, Morgan, and Shelby) had licensed barbers even before statewide licensing came into being in 1973. Moreover, after statewide licensing ceased in 1983, these same counties (plus two additional counties, Lauderdale and Baldwin) continued to require that barbers be licensed within their jurisdictions. Although these seven counties represent only a small fraction of the 67 counties in Alabama, they include a disproportionate percentage (about 40% in 1990) of the population.

Table 2 presents information on the year that each county's barber licensing took effect, the number of training hours required, and the number of apprenticeship hours barbers were required to complete in order to obtain a license. Lauderdale County actually passed its own licensing statute while the Alabama statute was still in effect (in 1980), but the county's statute was more restrictive than the state statute (requiring 500 more education hours and an apprenticeship). Baldwin County, on the other hand, passed a licensing statute in 1983 that was slightly less restrictive (requiring 500 fewer education hours) than the expiring state statute.

What this licensing heterogeneity means is that by our using statewide average data we may have underestimated the true effects of de-licensing on barber earnings and numbers (as well as those of cosmetologists) since some Alabama counties continued to license barbers after 1983. Ideally we would like to compare trends in barber earnings, barber employees, and barber shop numbers in those seven counties that continued to license barbers after the state statute expired with the corresponding trends in the remaining counties with no licensing requirements. The problem is that very few Alabama counties report such data on a continuous annual basis over the time period that we analyze. For example, only two of the seven counties that continued to license barbers after 1983 (Mobile and Jefferson) report data on payroll and the number of barber employees and employee payrolls over most of the period. And only one county (Tuscaloosa) of the 60 counties with no barber licensing requirements after 1983 reports such data for most years.¹⁴ However, data on the number of barber shops is reported for most years for six of the seven counties that continued barber licensing after 1983 (Baldwin County being the exception) and for from 16 to 19 of the 60 counties that did not. Here is what a comparison of the two groups of counties (C_{LIC} and C_{NO}) over period following the repeal of the state licensing statute in 1983 reveals (see also Table 3):

1. In the three years following the repeal of mandatory state licensing (1983-85), five of the six reporting counties that continued barber licensing (C_{LIC}) saw the number of barber shops fall while the number stayed the same in only one (Morgan County). However, in the 16 reporting counties that eliminated licensing requirements (C_{NO}), the number of shops fell in only six counties, while it remained the same in the other ten. *County Business Patterns* data do not allow us to distinguish between existing shops and new

¹⁴ A major reason for the incomplete data is the fact that the Census Bureau (and *County Business Patterns*) does not show statistical information that may reveal information about individual persons or business establishments.

shops. However, the difference in shop number trends between the two sets of counties is consistent with the possibility that de-licensing may have led to the creation of new barber shops in the de-licensed counties, though not in numbers sufficient to offset the secular decline in the number of barber shops. Over the 1983-94 period, however, the decline in the number of barber shops was about the same for both sets of counties. In five of the six counties that continued barber licensing (C_{LIC}), the number of barber shops fell. In the sixth (Shelby County) the number stayed the same. The overall percentage decline in the number of C_{LIC} barber shops over this period was 58%. In contrast, in the non-licensing counties, the number of shops fell in 14 of the 17 reporting counties while it remained the same in 3. The overall percentage decline in the number of barber shops in C_{NO} was 53%, slightly lower than in the C_{LIC} counties.¹⁵

2. The data on the number of barber employees over this period (1983-94) are extremely spotty. In the only two C_{LIC} counties (Jefferson and Mobile) for which we have barber employee numbers for most of this period,¹⁶ barber numbers declined both from 1983-85 and from 1983-94. For the C_{NO} group, however, the number of barbers actually rose in three counties over the 1983-85 period, while falling in three. Over the period from 1983-94, barber numbers increased in one county (Montgomery), stayed the same in one (Etowah), and declined moderately in Tuscaloosa and Calhoun. Clearly the trends in barber numbers differed in the way that we would have expected between the licensing and non-licensing counties, but the fact that data are unreported for so many counties requires caution here.

¹⁵ In a study of the effect of licensure requirements on the number of barber shops in the various states, Hall and Pokharel (2016) note that in the year 2011 Alabama had approximately 93 barber shops for every 100,000 residents. Alabama's barber shop/population ratio was the highest in the nation, while Utah, at 14 per 100,000 residents, was the lowest. Since Alabama, of course, was the only state without universal barber licensing in this year (and had been since 1982), it is tempting to conclude that the two are linked.

¹⁶ Jefferson County lacks data on employee numbers for 1994 and Mobile for 1993 and 1994.

3. Finally, we were able to compare average barber employee pay in a sample of counties that reported data for at least one of the three years preceding state barber de-licensing (1980-82) and likewise for the three years after (1983-85.) The sample includes seven counties that did not establish their own county barber-licensing requirements and two counties that did.¹⁷ Average barber pay from 1980-82 for those counties that continued to license barbers after the state licensing statute expired (C_{LIC}) exceeded average barber pay in the counties that did not by 13.2%. But in the three-years (1983-85) following the expiration of the state statute, average pay in the licensing counties now exceeded that in the non-licensing counties by 33%. Moreover, the widening gap was in part the result of average barber pay in the non-licensing counties actually declining (from \$7,257 to \$6,837) after 1982. In short, the trends in pay across the two sets of counties is again consistent with the possibility that more competition for barber services in the non-licensing counties may have had a dampening effect on barber pay.

Conclusion

There is a growing realization that, by restricting entry into occupations through the requirement of a license to practice, fewer employment opportunities can be the result (especially for groups such as minorities, immigrants, and those with lower levels of education). This growing realization has led to several recent state legislative proposals to deregulate certain occupations (Thornton and Timmons, 2015.)

But what are the effects of de-licensing? Are the job gains immediate? How much will pay fall if labor supply in the formerly licensed occupation increases? Are there spillover effects to other occupations? What we have found for the case of barbers in Alabama is that de-licensing

¹⁷ The six counties in the C_{NO} group are Calhoun, Colbert, Etowah, Houston, Montgomery, Russel, and Tuscaloosa. The C_{LIC} counties are Jefferson and Mobile.

appears to have resulted in a slight rise in inflows into the barbering profession, along with a drop in relative barber earnings. These findings were observed when Alabama was compared with other Southern states. They were also observed when barber numbers (including shops) and earnings in a handful of Alabama counties that continued to license barbers after 1983 were compared with a sample of other counties that did not. Moreover, the results were observed very shortly after de-licensing took place. As for cosmetologists, our results show a modest reduction in cosmetologist numbers, a finding that is consistent with the premise that barber de-licensing in Alabama has resulted in barbers becoming closer substitutes for cosmetologist haircutting services.

At a time when policymakers are reconsidering the costs and benefits of occupational licensing, our study provides some of the first empirical evidence on the effects of eliminating licensing legislation. What we have found from this very rare natural experiment involving a single state and a single occupation is that the results of delicensing appear to be observable, may occur relatively quickly, and are in accordance with what economic theory would predict.

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Figure 1: Raw Trends in the Market for Barber Services (1974-1994)

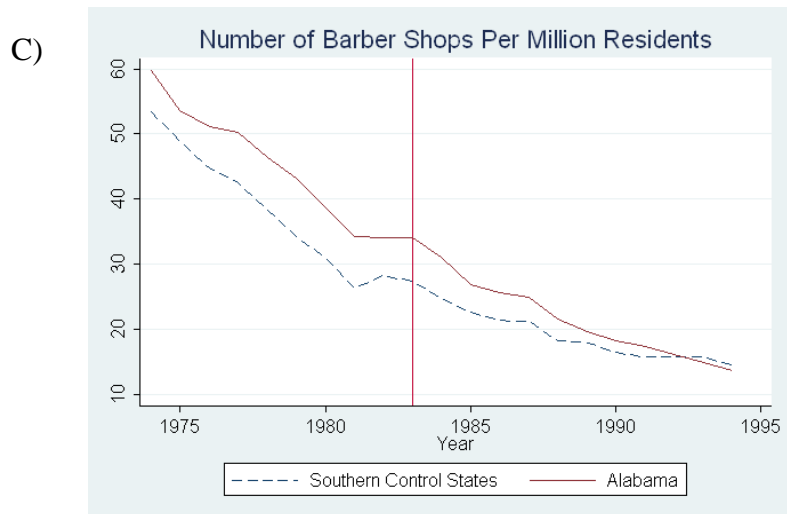
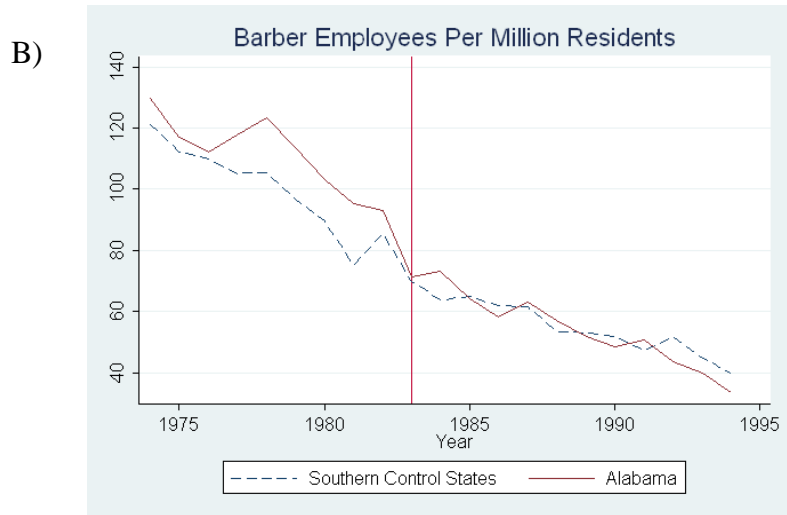
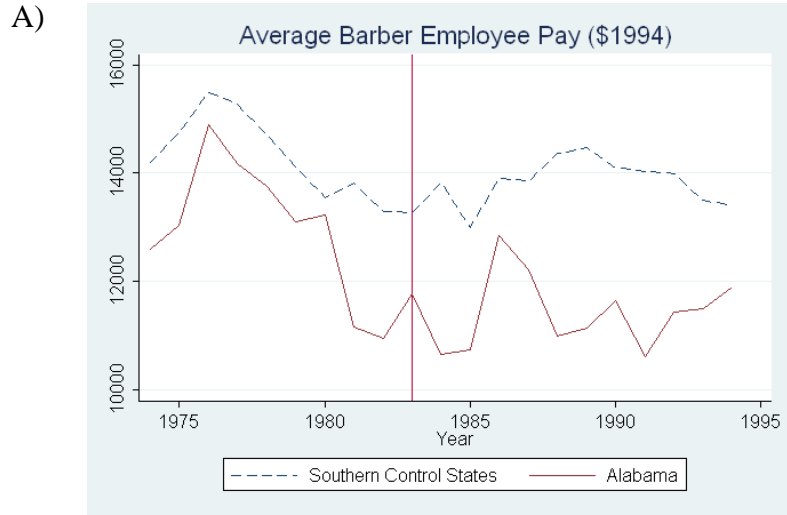
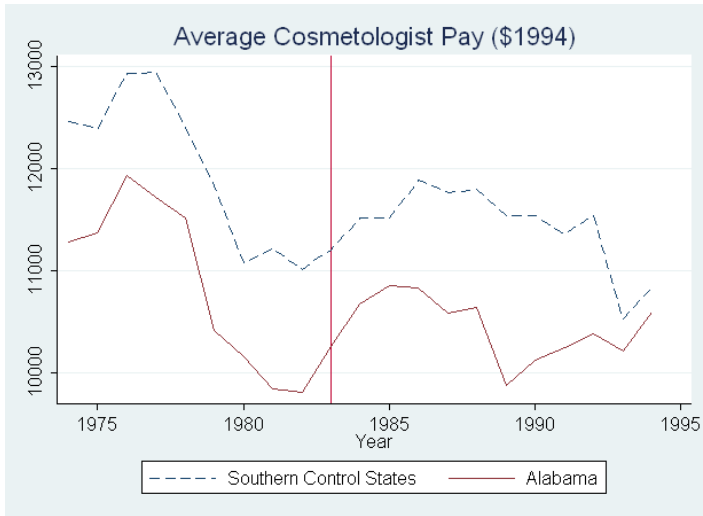
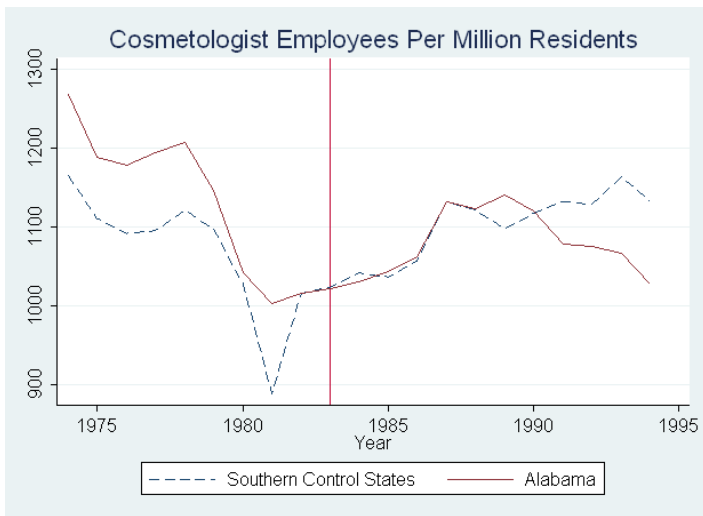


Figure 2: Raw Trends in the Market for Cosmetologist Services (1974-1994)

A)



B)



C)

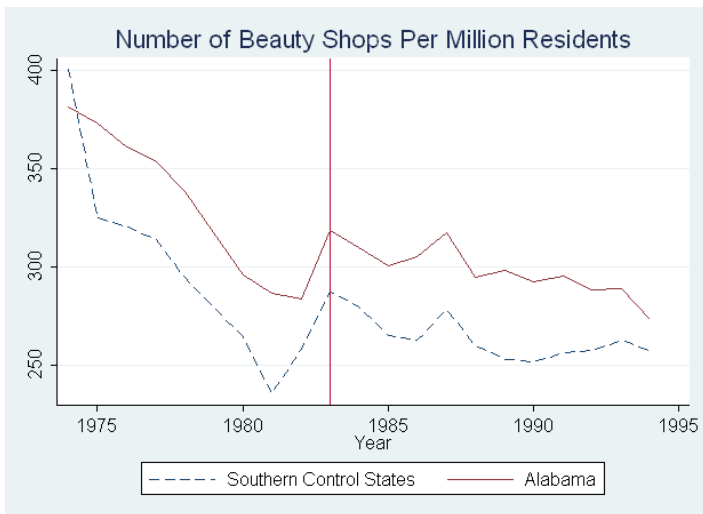


Table 1: Simple Difference-in-Difference Estimates

A) Average Annual Barber Earnings (\$1994)			
	Pre-1983	Post-1983	Difference
Alabama	\$12,986	\$11,450	\$1,536
Southern States	\$14,352	\$13,808	\$544
Difference	(\$1,366)	(\$2,358)	\$992

B) Barber Employees Per Million Residents			
	Pre-1983	Post-1983	Difference
Alabama	112	55	57
Southern States	100	55	45
Difference	12	0	12

C) Barber Shops Per Million Residents			
	Pre-1983	Post-1983	Difference
Alabama	46	22	24
Southern States	39	19	20
Difference	7	3	4

D) Average Annual Cosmetologist Earnings (\$1994)			
	Pre-1983	Post-1983	Difference
Alabama	\$10,890	\$10,437	\$453
Southern States	\$12,026	\$11,415	\$611
Difference	(\$1,136)	(\$978)	(\$158)

E) Cosmetologist Employees Per Million Residents			
	Pre-1983	Post-1983	Difference
Alabama	1137	1076	61
Southern States	1068	1098	-30
Difference	69	(22)	91

F) Beauty Shops Per Million Residents			
	Pre-1983	Post-1983	Difference
Alabama	332	299	33
Southern States	299	264	35
Difference	33	35	-2

Figure 3: Synthetic Control Estimates of the Effects of Barber De-Licensing

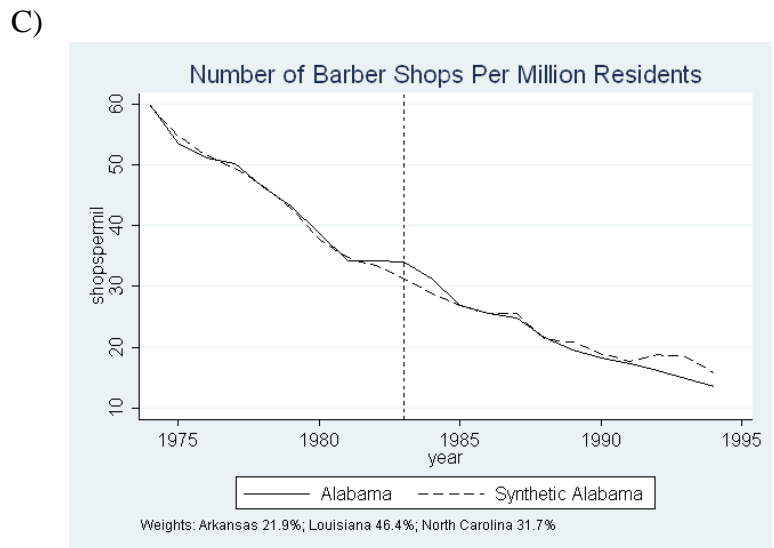
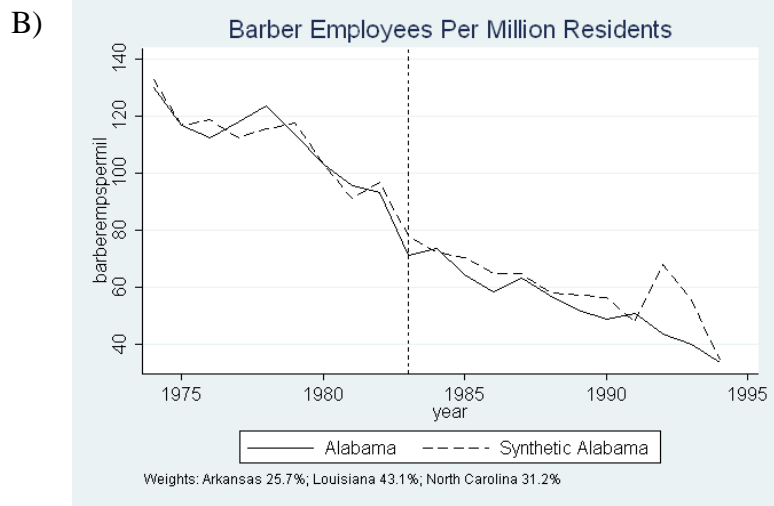
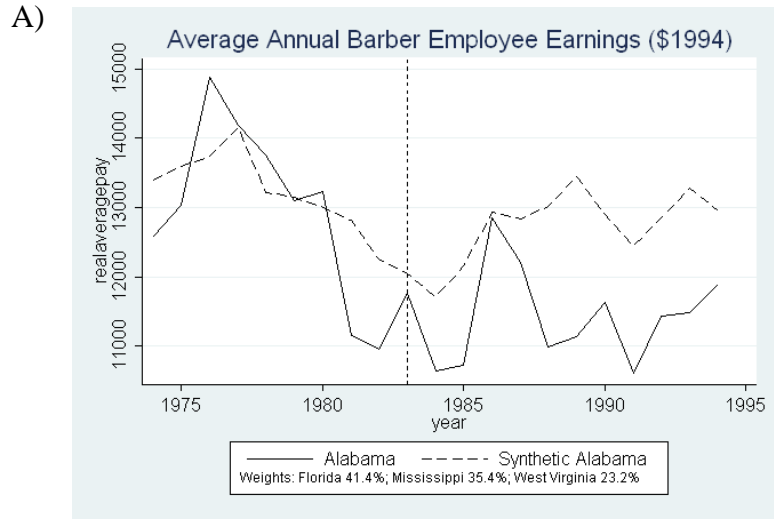


Figure 3 continued

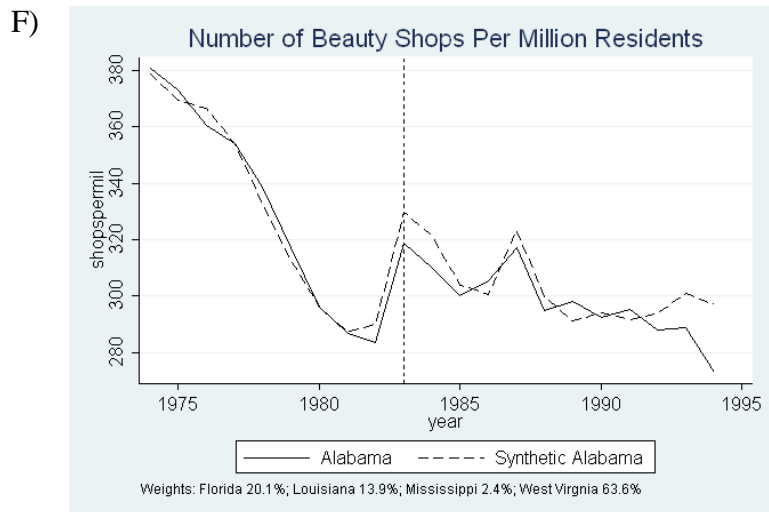
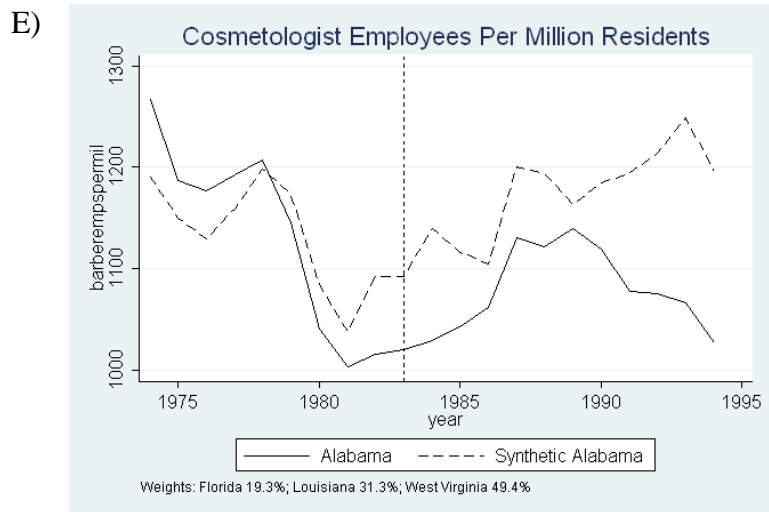
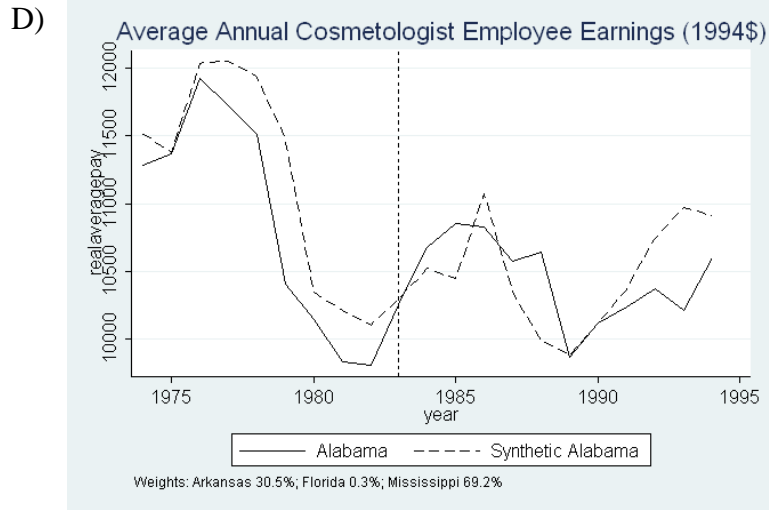
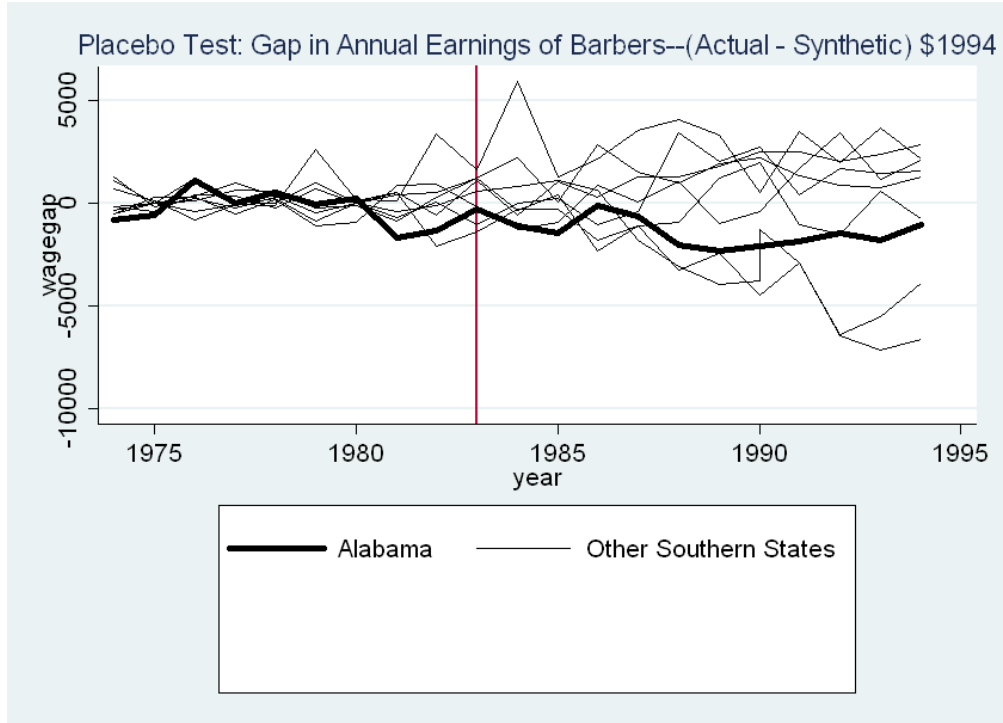


Figure 4: Placebo Tests Using the Synthetic Control Method

A)



B)

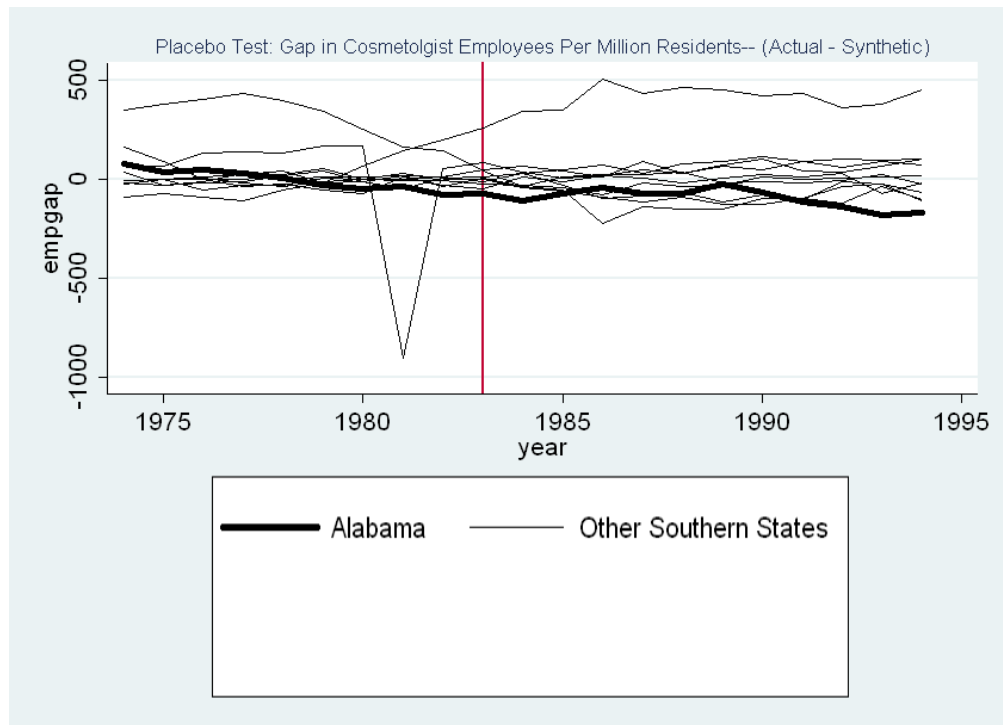


Table 2

Alabama County Barber Licensing Requirements

<u>County</u>	<u>Year of Enactment</u>	<u>Hours</u>	<u>Apprenticeship</u>
Statewide	1973*	1500	none
Baldwin	1983	1000	18 months
Jefferson	1951	1500	none
Lauderdale	1980	2000	18 months
Madison	1972	1350	none
Mobile	1967	1500	18 months
Morgan	1972	1350	none
Shelby	1951	1500	none

Note: All county-level information obtained from author phone interviews with representatives from county barbering boards.

* Alabama abolished its state barber licensing board as of 1983.

Table 3: Barber Shops, Barber Employees, and Average Barber Pay in Alabama Counties that Continued Licensing after 1983 (C_{LIC}) vs. Alabama Counties that Did Not (C_{NO})

		<u>1980-82</u>	<u>1983-85</u>	<u>1983-94</u>
Number of Barber Shops	C _{LIC}	Number of barber shops fell in 3 of 6 reporting counties, rose in 2, and stayed the same in 1.	Number of barber shops fell in 4 of 6 reporting counties and remained constant in 2.	Number of barber shops fell in 5 of 6 reporting counties. Overall decline was 58%.
	C _{NO}	Number of barber shops fell in 6 of 16 reporting counties, rose in 4, and stayed the same in 6.	Number of barber shops fell in 6 of 16 reporting counties and remained constant in 10.	Number of barber shops fell in 14 of 17 reporting counties and stayed the same in 3. Overall decline was 53%
Number of Barber Employees	C _{LIC}	Number of barber employees fell in both reporting counties (Jefferson and Mobile)	Number of barber employees fell in both reporting counties (Jefferson and Mobile)	Number of barber employees declined in both counties (Jefferson and Mobile) for which data were available. Declines were 39% and 15% respectively.
	C _{NO}	Number of barber employees fell in 1 county and rose in 2.	Number of barber employees rose in 3 counties and fell in 3 counties.	For four counties with continuous data, the number of barbers increased in 1 (Montgomery), stayed constant in 1 (Etowah) and declined in 2 (Calhoun and Tuscalosa).
Average Barber Pay	C _{LIC}	\$9,220	\$9,094	Data insufficient for calculating average barber pay for C _{LIC} and C _{NO} counties.
	C _{NO}	\$7,258	\$6,837	
		Ratio: C _{LIC} / C _{NO} = 1.133	Ratio: C _{LIC} / C _{NO} = 1.330	