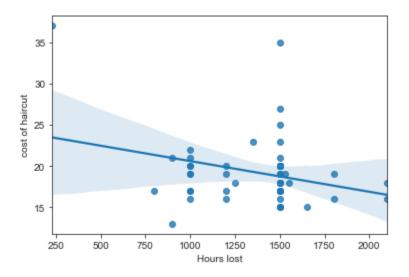
## Finnian Speier

## Regulatory burden in hairdressing and price

This paper will analyze the association between the regulatory burden placed on hairdressers and the cost of a haircut. This paper will assess this cost both relative to the cost of living and independent of the cost of living in an attempt to establish the effect occupational licensing has on costs, and perhaps the effect costs have on occupational licensing.

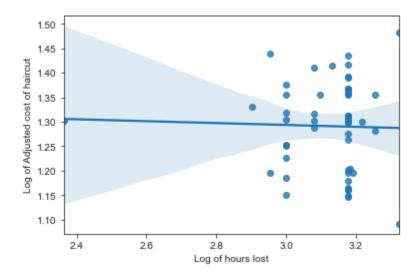
First, this paper will simply look at the cost of a haircut relative to occupational licensing by the state, ignoring all other factors. This will help us establish a baseline and perhaps allow us to see the beginning of some trends. (past data bellow).



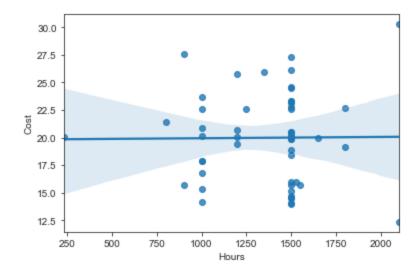
On the Y-axis, we have the cost of a haircut in dollars, and on the X-axis, we have the hours of training filling out forms and apprenticeships it takes to be able to start cutting hair for a living. This graph would suggest a very strange conclusion, that for some reason as the regulatory burden increases, the cost of a haircut decreases. The

P-value suggesting that there is a correlation between the cost of a haircut and the number of hours lost is 0.042. That seems impossible.

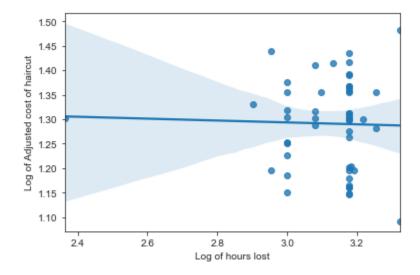
So we should analyze the data from a different perspective; instead of just taking the raw data, we should take the log of the hours lost and the cost of a haircut to reduce the impact of extremes. The results were extremely interesting. When we take the log of the data unadjusted for income, we see there is no correlation at all. This still doesn't fit into the economic model that as the barrier to entry increases, so too does price.



So perhaps the problem is that the data isn't controlled for the cost of living. So now we will take a look at the data when the cost of living of a state is taken into account. Maybe controlling for that will reveal new information.



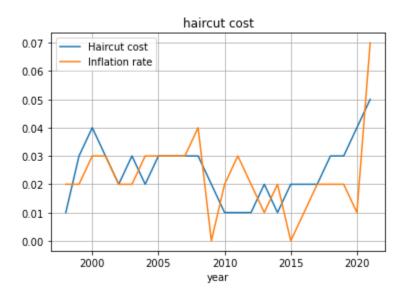
As you can see now there is no correlation. When we take the log of the data we still see that there is no correlation.



If that were the case, then people would be willing to go to school longer to receive less pay, and while school might be fun for some, it is both expensive and time-consuming. Since it's a fundamental principle of economics that the higher the cost of entry, the higher the price, we can ignore the possibility that people are more likely to enter a field with a higher cost of entry. However, it is possible that lower costs could cause corporations to lobby for higher barriers to entry.

These corporations could likely subvert or lessen the impacts of the higher burden while their smaller competitors would struggle to do the same. So in order to prove this hypothesis, we should look at more data on the cost of haircuts relative to hours spent obtaining a license; this paper will also need to see the changes in the data over time to see if new regulatory burdens were placed as prices dropped.

According to NCLS, the number of people whose jobs require a license has increased from 5 percent in 1960 to 25 percent in 2018. While it's not difficult to find sources on modern-day occupational licensing, it's far more of a challenge to find more specific data on the history of either price of haircuts over time or the difficulty to obtain a hairdresser's license in the past. However, the price of haircuts over time was easier to find, and it is possible to look at the general trend of occupational licensing and compare that to the cost of a haircut over time.



Based on these graphs, we can see that while inflation and the cost of a haircut don't change completely in tandem, on average, they are similar. One would expect that since the regulatory burden is increasing over time and almost no technological

changes have occurred over time that the cost of haircuts would be going up relative to inflation. However, that's not the case.

However, there is another angle this paper has not looked at this problem at, the actual wage of hairdressers. According to usnews.com, the salary of a hairdresser has increased slightly below inflation over the past ten years. This is despite the fact that for an individual it's become harder and harder to get a job as a hairdresser. This trend would make sense if few or no jobs were beating out inflation over that stretch, but that couldn't be further from the truth.

According to FRED.com, real wages have risen substantially over the past ten years. So what could explain a prospective hairdresser's choice to enter into a field with such a high barrier to entry?

It also seems that despite these changes, hairdressing companies didn't have a shortage of workers till the great resignation. Unfortunately, both the covid 19 pandemic and the massive underemployment that followed will skew significantly. However, we can still compare the job growth to that of other jobs in the United States.

The bureau of labor statistics has predicted a 19 percent job growth for barbers over the next ten years, which is significantly faster than average. The profession has also been in dire need of hairdressers for quite some time, even before the pandemic. So it is possible that while prices are remaining stable, there is a growing shortage of hairdressers.

A shortage of workers is never good for a corporation. Not only will they have a harder time filling demand, but they will also likely need to pay more, plus when a company has a shortage of workers, their turnover rate will be higher since there will

likely be higher stress placed on workers. This means a corporation will have to spend more time and money training new workers. It would make sense for the corporation to simply increase their prices and the wages of their hairdressers to reduce demand and increase the supply of hairdressers. According to zippia.com, the unemployment rate for barbers is less than 2 percent, far below the national average.

On top of that, the total number of barbers in us has decreased over the past 7 years, according to Statista. While the number of barbers was going up until 2018 it started to decline, and since the pandemic, the number of barbers has been dropping steadily.

With the expected job growth and the already low supply of barbers, we can come close to ruling out the idea that corporations lobby for increased regulations to the hairdressing field since it's negatively affecting their ability to keep their doors open. On top of that, the higher number of people that need a license to work could be explained by the growing complexity of the average job.

Far fewer people work in factories today than they did twenty years ago, and far more people work in computer science, so it could be the case that more complex jobs are more likely to need a license. This is not by any means to say that the licenses are good; this only means that it's not just the employees and consumers but the business owners that are affected.

So it seems as if few theories remain. Perhaps businesses had nothing to do with the increase in regulatory burden, and it was simply people who hoped that the increased regulation would either improve the quality of haircuts or decrease the number of haircut-related accidents.

While that idea is open to speculation, at least in theory, any business that hired hairdressers that could not safely and professionally cut hair would definitely go out of business. On top of that, many of us observed that one didn't need 1500 hours of training to cut hair during the covid pandemic as many of us got safe and at least passible haircuts from relatives.

So, in the end, it seems that occupational licensing is unlikely to be beneficial as it may be contributing to the shortage of hairdressers. While this is an interesting conclusion, more data like the price of a haircut over time will be needed to solidify the evidence that I have found here. Even with that data, there might still be unanswered questions, like why aren't haircut companies raising prices to help stop the shortage they are experiencing, and why do new regulations keep being placed despite the fact that they don't really seem to help. In the end, these questions might be impossible to answer with certainty, but perhaps with more data, the truth can be uncovered.

Sources, I will make a proper work sited for the final draft.

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