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Occupational Licensing: Scant Treatment in Labor Texts

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Abstract

According to the Council of State Governments (CLEAR 2004), more than 800 occupations are subject to licensing requirements in at least one state. It is, therefore, not surprising that a 2006 Gallup survey found that 29 percent of the workforce was required to hold a license from a government agency (Kleiner and Krueger 2008).

Licensing affects a much larger percentage of workers than either the minimum wage or unionization. In 2003, less than 3 percent of hourly workers were paid the minimum wage (Kaufman and Hotchkiss, 2006, 283). As for unionization, we reproduce Figure 1 from Kleiner and Krueger (2008); licensing affects about two and a half times more workers than unionization.

Licensing is one of the most important forms of labor regulation, yet textbooks in labor economics give it scant attention. We identified five undergraduate labor economics textbooks currently in print, listed in Table 1. All but one have been published in four or more editions.

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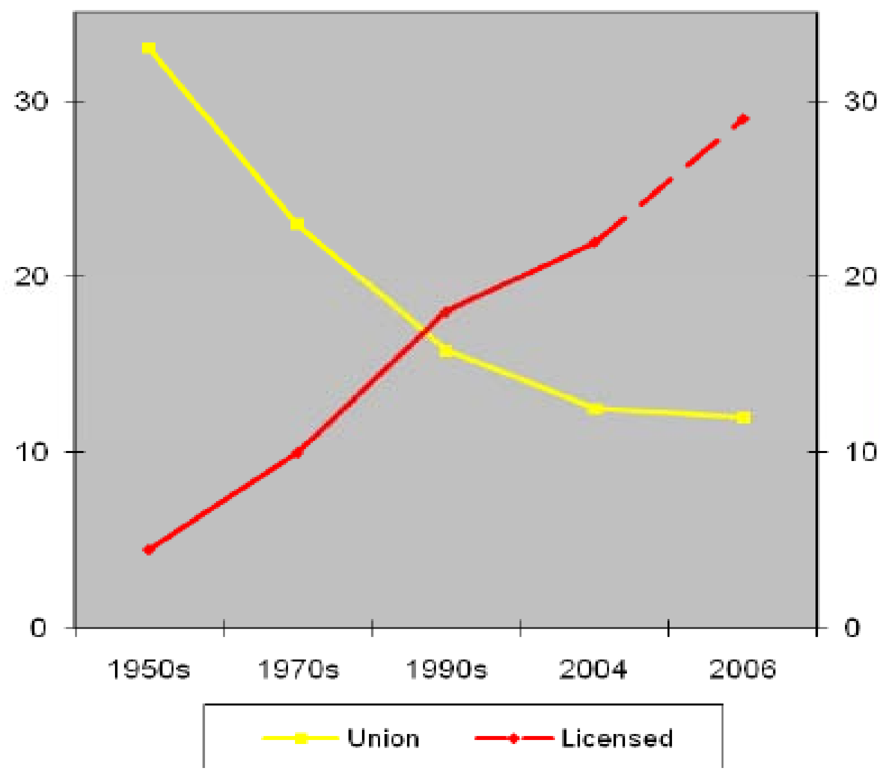
Acknowledgment: We thank Shruti Rajagopalan for reviewing the out-of-print labor texts treated in Table 2 of this paper.

Figure 1: Comparisons in the Time-Trends of Two Labor Market Institutions: Licensing and Unionization (percent of workers)



Source: Kleiner and Krueger (2008, 10)

Consider the textbook by George Borjas. There are 11 pages covering the minimum wage. If he devoted pages in proportion to workers covered, then 11 pages on the minimum wage would correspond to 99 pages on licensing. Ehrenberg and Smith would give 72 pages to licensing. Hyclak, Johnes, and Thornton would give 135 pages to licensing. Instead, in each case, there is zero. While appropriate coverage of a topic depends on both its scope and impact (e.g., wage and employment effects), and therefore probably does not that require pages be proportionate to the number of workers affected, it is hard to imagine writing a labor economics textbook without covering one of the most important forms of labor market regulation.

Table 1: Coverage of Occupational Licensing, Unionization, and the Minimum Wage in Labor Economics Textbooks Currently in Print

Textbook	Occupational Licensing Coverage	Minimum Wage Coverage	Unionization Coverage
George Borjas (2008)	0 pages	11 pages	1 chapter
Ronald Ehrenberg and Robert Smith (2009)	0 pages	18 pages	1 chapter
Thomas Hyclak Geraint Johnes, and Robert Thornton (2005)	0 pages	15 pages	1 chapter
Bruce Kaufman and Julie Hotchkiss (2006)	5 pages	14 pages	2 chapters
Campbell McConnell, Stanley Brue, and. David Macpherson (2009)	5 pages	7 pages	2 chapters

Our article focuses on undergraduate labor economics texts that are currently in print. As a supplement to our piece, Shruti Rajagopalan, a doctoral student at George Mason University, kindly compiled comparable information for some out-of-print texts. As Table 2 clearly indicates, the scant coverage that we document among currently available texts is also evident among older texts. It seems that labor texts have a long history of neglecting occupational licensing.[3]

In the remainder of this paper we review the economic literature on occupational licensing. Although the labor texts' coverage of the minimum wage and unionization may reflect the extensive literature on these topics, our review of the research on occupational licensing shows that there is ample cause and material to give at least a chapter to licensing. We then return to the sample of the five in-print textbooks and raise the question: Why have labor textbooks mostly neglected the issue?

3 Reynolds (1995) is an exception. He provides an excellent overview of the political economy of occupational licensing, with much of the discussion devoted to case studies of medicine and barbering/hairdressing. Although he only briefly discusses quality assurance issues, he does point out that the low rate of license revocation by licensing boards belies the stated purpose of quality assurance. Reynolds also explains that the overall effect of licensing on quality is ambiguous because licensing may cause consumers to substitute do-it-yourself or black market services for high priced ones produced by licensed providers. However, Reynolds has limited coverage of relevant research (though much research has been done since his book's publication) and his statement that "licensing is confined to a few hundred" occupations might make readers underestimate the coverage of licensing regulations.

Table 2: Coverage of Occupational Licensing, Unionization, and the Minimum Wage in Some Out-of-Print Labor Economics Textbooks

Textbook	Occupational Licensing Coverage	Minimum Wage Coverage	Unionization Coverage
John T. Addison and W. Stanley Siebert (1979)	6 pages	4 pages	5 pages
Gordon F. Bloom and Herbert R. Northrup (1973)	5 pages	1 chapter	2 chapters
Robert M. Fearn (1981)	0 pages	1 chapter	1 chapter
Robert J. Flanagan, Robert S. Smith and Ronald Ehrenberg (1984)	0 pages	19 pages	3 chapters
Belton M. Fleisher and Thomas J. Kniesner (1984)	3 pages	13 pages	1 chapter
Richard B. Freeman (1979)	0 pages	2 pages	30 pages
Daniel S. Hamermesh, Albert E. Rees, and Randall K. Filer (1996)	1 page	9 pages	3 chapters
Juanita M. Kreps, Phillip L. Martin, Richard Perlman and Gerald G. Somers (1980)	0 pages	10 pages	7 chapters
Gary A. Moore and Randy D. Elkin (1983)	0 pages	2 pages	7 chapters
Lloyd G. Reynolds (1982)	0 pages	9 pages	13 chapters
Morgan Reynolds (1995)	6 pages	9 pages	1 chapter
Ingrid H. Rima (1981)	0 pages	10 pages	1 chapter

Economic Literature on Licensing

Although licensing is one of the "fastest growing" labor market institutions (Kleiner and Krueger 2008, 1), it is hardly new. Friedman (1965, 489) stated that between "1890 and 1910 occupational licensing first achieved a firm foothold in the statute-books of most American states." Among the licensed occupations were doctors, plumbers, electricians, funeral directors, nurses, and horseshoers. By the late 1960s, ten percent of U.S. national income originated in occupationally restricted labor markets (Carroll and Gaston 1981), some seven million people worked in jobs that required licensing, and the number of licensed occupations ranged from 63 in West Virginia to 181 in Illinois (Thornton and Weintraub 1979). Licensed occupations included egg graders, tree surgeons, and jockeys.

Not surprisingly, an institution as common as licensing has been an active area of economic research. Economic analysis of occupational regulation can be traced back to Adam Smith's discussion of long apprenticeships in *The Wealth of Nations* (1776, 116-59), his critical remarks about the "privileges of graduation" (762, 780), and his important letter to William Cullen (of 20 September 1774) opposing reforms that would impose university-study requirements for medical degrees that otherwise were attainable by examination only. Milton Friedman's *Capitalism and Freedom* (1962) contains a chapter on occupational licensing, with particular attention paid to the ubiquity of licensing, especially in medicine. Friedman formulates the challenge, implicit in Smith, that licensing destroys opportunities and suppresses benefits while achieving little to nothing in the way of quality assurance above what could be achieved by less coercive arrangements, whether they be optional state certification or purely voluntary and private forms of assurance. Several other works that had served to provide valuable skeptical assessments of occupational licensing include Gellhorn (1956), Shimberg (1982), Williams (1982), and Young (1987, 1993); and on the UK Lees (1966) and Potts (2009).

One prominent strand of research focuses on licensing as a barrier to entry. Adams et al. (2002) conclude that licensing reduces the supply of cosmetology services by restricting entry into the occupation; in a similar paper they conclude that regulations restrict the supply of midwifery services (Adams et al., 2003). Likewise, Federman et al. (2006) find that licensing requirements reduce the supply of manicurists. Carpenter and Stephenson (2006), Jackson (2006), and Jacob and Murray (2006) find that an increased educational requirement for licensing reduces the supply of new certified public accountants. The imposition of this regulation, 150 hours of college education instead of merely a bachelors degree, is particularly attractive for identifying the entry-barrier effects of occupational licensing requirements because it was imposed in different years in different states (e.g., Georgia in 1998 and Ohio in 2000). Kleiner and Todd (2007) find that tighter state bonding/net worth requirements are associated with fewer mortgage brokers. It should be noted, however, that evidence of entry barriers arising from licensing is not by itself decisive evidence against licensing; indeed, proponents of licensing would argue that licensing is intended to prevent entry by low-quality producers.

A closely related body of research examines the distributional effects of licensing barriers to entry. Dorsey (1983, 171) finds that "licensing regulations exclude less-educated and minority workers more than proportionally." Kleiner and Krueger (2008, 7) report that "Workers who have higher levels of education are more likely to work in jobs that require a license." Similarly, Federman et al. (2006, 238) conclude that requiring English proficiency for obtaining a manicurist license "nearly eliminates the increase in the number of Vietnamese manicurists associated with increases in [Vietnamese population]." Walter Williams (1982) aptly treats licensing in light of the "economic ladder" of skill and career formation. By eliminating rungs at the bottom of the economic ladder, licensing makes it more difficult to get on the economic ladder. Those hit hardest are those without family and other resources to boost them up to grab on to the remaining rungs.

A related stream of research considers the effect of occupational licensing on the interstate mobility of workers. Pashigian (1979, 24), analyzing the labor market for attorneys, finds, "Occupational licensing has had a quantitatively large effect in reducing the interstate mobility of professionals." Similarly, in a study of interstate migration patterns for people in 14 occupations,[4] Kleiner et al. (1982, 383) "show that more restrictive state licensing statutes reduced inmigration."

Barriers to entry reduce supply and competition. Kleiner and Krueger (2008) find that licensing is associated with a 15 percent wage premium. Further evidence is provided by Pfeffer (1974) who finds a negative relationship between the ease of licensing and income of accountants, attorneys, barbers, dentists, and pharmacists, though he finds no such correlation for real estate agents. Similarly, Kleiner and Kudrle (2000) find that tougher licensing requirements for dentists raise practitioners' incomes. Timmons and Thornton (2008a) conclude that radiologic technologists in states with licensing earn as much as much as 6.9 percent more than those working in states without licensing; Timmons and Thornton (2008b, 141) find that "certain licensing provisions may have increased the earnings of barbers by as much as 26 percent." However, in contrast to the many papers finding licensing raises incomes in licensed occupations, Lueck et al. (1995) find little evidence that licensing restrictions increase the price of legal services or the income of attorneys.

Measuring the effects of licensing on incomes is relatively easy compared to measuring the effects on lifetime returns or profits. Licensing is a prime example of what Gordon Tullock (1975) coined the *transitional gains trap*. When licensing is imposed it usually grand-fathers in certain incumbent practitioners, who earn super-normal returns over their lifetimes. The new generation, however, faces the costs of the licensing requirements. The costliness of meeting the requirements will vary considerably for people, depending on their aptitudes, family resources, aspirations, and so on. But the costs must be factored in to any notion of lifetime returns—and returns must be understood broadly, so as to include psychic returns in official validation, professionalization, prestige, and distinction. It is possible that subsequent generations of licensed practitioners do not earn pecuniary returns much above their alternative life paths. (It is also possible that subsequent generations will seek supranormal returns by advocating stricter licensing standards or the application of licensing requirements to the unregulated.) Tullock explains that, even if the subsequent generations earn only normal returns, they have as much incentive to oppose abolition of licensing as the first generation had to support its imposition – thus the name, transitional gains trap. The beneficiaries end with the first generation of privilege, yet occupational licensing policies continue one generation after another because of transitional interests.

Since the purported benefit of occupational licensing is quality assurance for customers, it is not surprising that researchers have also examined output markets served by licensed occupations.[5] But measuring the quality effects of licensing is

4 The occupations are: accountants, architects, engineers, lawyers, dentists, pharmacists, physicians, surveyors, insurance agents, real estate agents, registered nurses, practical nurses, barbers, and cosmetologists.

5 We confine the following discussion to empirical studies of licensing and quality. Conceptual studies of licensing and quality include Leland (1979), who suggests that minimum quality standards may be beneficial while acknowledging, as Klein (2002) argues, that alternate means may be more effective in assuring quality. Law and Moon (2005, 723) argue that during the Progressive Era licensing "arose to improve markets as specialization and advances in

challenging, both empirically and conceptually. Milton Friedman suggested that licensing restrictions are somewhat like forbidding cars less that Cadillac quality. The average car in a polity that disallowed cars less than Cadillac quality would, ceteris paribus, be higher quality than that of a polity that observed freedom in such matters. But in terms of *quality received by the average citizen, and especially low income citizens,* the more liberal polity would do better because there would be much fewer citizens without a car.[6] An implication of Friedman's argument is that honest but lesser quality goods and services are part of the optimal mix available in the marketplace. Besides doing without, do-it-yourself and black-market services are induced by restrictions. The quality effects of doing without, doing it yourself, and black markets are often neglected in empirical investigations of licensing's effects.

Shilling and Sirmans (1988) find that state licensing of real estate agents is associated with fewer customer complaints and they suggest that licensing improves service quality. Also examining the real estate market, Johnson and Loucks (1986) conclude that licensing regulations result in better service for consumers. In contrast, Carroll and Gaston (1981, 973) report that "consistently from occupation to occupation [among the seven they studied] there existed a strong negative association between per capita numbers of an occupation and measures of per capita quality of service received" thereby implying that "restrictive licensing may lower received service quality." Carroll and Gaston's conclusion is consistent with Kleiner and Todd's (2007) results showing that tighter state bonding/net worth requirements for mortgage brokers is associated with higher foreclosure rates and a greater percentage of high interest mortgages. Still other studies find no correlation between licensing and output quality. Kleiner and Kudrle (2000) study the dental health of Air Force recruits and find recruits from states with more stringent dentist licensing standards do not have better dental health than recruits from states with lower standards. Similarly, Skarbek (2008, 71) analyzes Florida's relaxation of restrictions on construction contractors in the wake of Hurricanes Frances and Katrina and finds "little evidence of significant detrimental effects from the policy change" even in an environment in which asymmetric information issues should be most germane (see also Skarbek 2009). Paul (1984) finds no evidence that states licensing physicians experienced higher quality care as measured by mortality rates. Several economists suggest that licensing suppresses innovation (see quotations at Svorny 2004, 283f).

Although the empirics of quality are murky, Kleiner (2006) concludes that it would be false to assert that on balance the literature constitutes evidence of consumer benefit, which is the only thing that, if large enough, could possibly outweigh the costs of licensing. Without a strong case for consumer benefit, *a fortiori* the policy fails on cost-benefit grounds. It should, therefore, come as no surprise that Svorny's (2004) comprehensive review of judgments of economists on medical licensing showed that

knowledge made it increasingly difficult for consumers to judge the quality of professional services."

6 Support for Friedman's conjecture is provided by Kleiner and Todd's (2007) finding that tighter state bonding/net worth requirements for mortgage brokers is associated with fewer subprime mortgages.

they very preponderantly point toward liberalization, though not necessarily abolition. If licensing of medical services does not find support from economists, we may surmise that even less support would be given to licensing of other services – Table 3 presents a small sample of absurd cases.[7]

Table 3: Some Examples of Licensed Occupations

Occupation	**State(s)**
Athletic Trainer	Most
Auctioneer	Several
Barber, Cosmetologist	All
Beekeeper	Maine
Casket Seller	Several
Chimney Sweep	Vermont
Dietician	Most
Elevator Operator	Massachusetts
Florist	Louisiana
Fortune Teller	Maryland
Hairbraider	Several
Hearing Aid Dispenser/Fitter	All
Interior Designer	Several
Interpreter for the Deaf	Illinois, Texas
Jai Alai Athlete, Umpire, Vendor, Ball Maker, Ticket Seller	Rhode Island
Junkyard Dealer	Ohio
Lightning Rod Installer	Vermont
Lobster Seller	Rhode Island
Manure Applicator	Iowa
Maple Dealer	Vermont
Motion Picture Projectionist	Massachusetts
Mussel Dealer	Illinois
Photographer (Itinerant)	Vermont
Prospector	Maine
Quilted Clothing Manufacturer	Utah
Rainmaker	Arizona

Source: Summers 2007, 43.

Unlike the minimum wage and unionization, occupational licensing does

7 A polemical yet astute video by Ted Balaker on the licensing of interior designers is available at http://reason.tv/video/show/741.html. It nicely illustrates the coercive nature of licensing laws.

not seem to have any open defenders among economists (although Law and Kim 2005 may be read as supportive of the restrictions). Meanwhile, skeptics have been vocal even in establishment venues. A nice article by Kleiner (2000) appeared in the *Journal of Economic Perspectives*. Alan Krueger (2006) published a column in the *New York Times*, discussing Kleiner's important monograph (2006) and gently challenging conventional notions: "In a rational world … the available research should provoke a reconsideration of whether occupational licensing is beneficial for society as a whole or only for those lucky enough to hold licenses" (Krueger 2006).

Failure of the Labor Economics Textbooks

Despite the importance of occupational licensing and a considerable body of economic research, again, as shown in Table 1, five in-print undergraduate textbooks in labor economics fail to do justice to the topic. We are not aware of any that does better.

In Table 1, we list the number of pages devoted to occupational licensing. Ehrenberg and Smith subtitle their book "Theory and Public Policy" yet omit entirely a form of public policy that bears directly on 29 percent of working Americans. Two others also have zero, including the text by Hyclak, Johnes, and Thornton. Oddly, one of that text's authors, Robert Thornton, has written several papers on licensing (Thorton and Weintraub 1979; Timmons and Thornton 2008a and 2008b).

The other two texts both offer reasonable but brief overviews of occupational licensing. Kaufman and Hotchkiss (2006) devote 5 of 712 pages to licensing. They discuss the prevalence of licensing requirements, offer several consumer protection rationales for licensing, and tell of monopoly rents that result from licensing's barriers to entry. In footnotes, they cite about a dozen papers from the occupational licensing literature, including Kleiner and Kudrle's (2000) finding that restrictive dental licensing rules are not associated with better dental health.

McConnell, Brue, and Macpherson (2009) devote 5 of 600 pages to occupational licensing, but their coverage is dispersed in three places. Like Kaufman and Hotchkiss, the authors provide their readers with a sense that licensing regulations affect many workers and occupations and explain how licensing rules can be a source of economic rents for suppliers. Whereas Kaufman and Hotchkiss (2006) discuss the consumer benefits that supposedly result from licensing, McConnell, Brue, and Macpherson (2009) point out that the demand for licensing comes from occupations rather than consumers.[8] They cite some studies on occupational licensing, but only about half as many as Kaufman and Hotchkiss. None of the textbooks related occupational licensing to Tullock's transitional gains trap. Table 1 indicates that the texts devote between 7 and 15 pages to the minimum wage and at least one full chapter to unionization.

8 Our literature review focuses primarily on the labor market and quality assurance effects of occupational licensing rather than the political economy of licensing. For more on the latter see Wheelan (1998).

While the number of pages devoted to a topic should depend on the economic issues related to that topic rather than solely the number of workers affected by the particular phenomenon, it does seem peculiar that labor economics texts would devote 20 or more pages to unionization while ignoring occupational licensing.[9]

Why the Neglect?

We conclude with a few possible explanations for the failure. One possibility is that licensing is a difficult policy to summarize because of its state-by-state diffuseness. Of course, many occupations are licensed in all states and, as documented above, interstate variation in licensing has not proven to be an insurmountable obstacle to economic research. Moreover, one of the primary purposes of textbooks is to summarize difficult yet important topics.

Another possible reason why authors neglect licensing is that quality and safety assurance are difficult to incorporate in traditional models of supply and demand. Limiting the coverage of topics to those easily dealt with by a certain set of tools instead of expanding the toolbox is not a way to expand the frontiers of knowledge. And similar difficulty in exploring, say, institutional aspects of unionization does not seem to have dampened coverage of that topic.

A third possible reason for the scant treatment of licensing is herd behavior of authors imitating existing labor texts. Alternatively, the herd behavior may exist among publishers, who wish to produce texts similar to those published by their competitors.

Lastly, if labor economists tend to favor government regulation over voluntary exchange in the marketplace they may be inclined to give licensing parsimonious treatment because it is difficult to ignore the supply side effects of licensing restrictions. Moreover, Kleiner's (2006) finding, noted above, that existing research does not point to strong quality assurance effects from licensing implies that few, if any, occupational licensing rules generate benefits exceeding their costs. Such a conclusion would obviously be uncomfortable for authors sympathetic to government intervention in labor markets.

Whatever the reasons for the neglect of occupational licensing, it makes little sense for labor economics texts to give scant treatment to such an important labor market institution.

9 Although the focus of our paper is undergraduate texts, we also examined Boeri and van Ours's (2008) graduate text. Oddly, for a book titled *The Economics of Imperfect Labor Markets*, it contains no coverage of occupational licensing, an institution that inhibits labor market competition.

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