ECONOMIC ISSUES

THE COSTS AND BENEFITS OF OCCUPATIONAL REGULATION

by

Carolyn Cox and Susan Foster

BUREAU OF ECONOMICS

FEDERAL TRADE COMMISSION

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Cox and Foster (1990) — The Costs and Benefits of Occupational Regulation

Editor's Preface to this Online Edition

This report by Cox and Foster is one of the most extensive and well-thought out reviews of the balance between the costs and benefits of occupational regulation that I have uncovered. It is also widely referenced by other reviews. [†] To continue to make the report widely available as a reference, I have created this unofficial (i.e. not published by the FTC) online edition of the report. I recreated this edition, by scanning and optical character recognition, from a paper copy of the FTC published report obtained in 2002. In this process, I have attempted to be true to the content, the overall layout and the original page breaks. Internal or external references to particular pages and paragraphs within the report remain valid. I have used margin and font-size settings that closely match the original line content, although there are slight variations from the original. I have deviated from the report's original format in replacing the original typewriter-style serif font with the Trebuchet MS sans-serif font; a font designed to be highly readable via computer monitor. I have also added a heading at the top of each page to facilitate tying single printed pages back to their source after the elapse of some period of time.

In terms of report content, Cox and Foster were writing before the World Wide Web (W3) became the widely available resource that it is in 2004. The major impact that the W3 has had is that background information is often much more readily available to the consumer and the cost of obtaining it is lower. In short, the consumer has more opportunity to compare the specifics they are encountering with articles on accepted practice. This may in itself constitute sufficient reason to reevaluate the need or form of some occupational regulation when it comes up for sunset review. While my own interest in this report stemmed from the regulation of massage, the applicability is far wider. Availability of the considerations it contains become particularly important in light of term limits and the shortened institutional memory and experience of many state legislatures.

[†] For instance, Office of the Legislative Auditor, State of Minnesota: Occupational Regulation — A Program Evaluation Report, Report 99-05, 3 Feb 1999, <http://www.auditor.leg.state.mn.us/ped/1999/pe9905.htm>

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FEDERAL TRADE COMMISSION

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Table of Contents

Cox and Foster (1990) — The Costs and Benefits of Occupational Regulation

Executive Summary

This paper examines the costs and benefits of occupational regulation. Over 800 occupations arc licensed by at least one of the fifty states.[1] When properly designed and administered, occupational licensing can protect the public's health and safety by increasing the quality of professionals' services through mandatory entry requirements — such as education — and business practice restrictions — such as advertising restrictions. This report finds, however, that occupational licensing frequently increases prices and imposes substantial costs on consumers. At the same time, many occupational licensing restrictions do not appear to realize the goal of increasing the quality of professionals' services. While the majority of the evidence indicates that licensing proposals are often not in the consumers' best interest, we cannot conclude that the costs of licensing always exceed the benefits to consumers. In considering any licensing proposal, it is important to weigh carefully the likely costs against the prospective benefits on a case by case basis.

For over a decade, the staff of the Federal Trade Commission has examined the effects of licensing restrictions and provided state legislatures and regulatory commissions with comments on the benefits and costs of these restrictions.[2] In general, we find that licensing is most likely to be

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[1] Berry (1986). p. 379.

[2] Studies of licensing issues by the Federal Trade Commission's Bureau of Economics include Liang and Ogur (1987) and Bond (1980). For some recent examples of invited staff comments to various legislative bodies, see Comments of the staff of the Federal Trade Commission's Dallas Regional Office and the Bureau of Competition re Texas' Electrician and Electrical Contractor Licensing Act, Presented to Hon. Glenn Repp, House of

beneficial when consumers cannot evaluate the quality of a professional's services. For example, persons needing emergency health care may benefit from licensing requirements. In this situation, consumers may be unable to evaluate the quality of service, and the expected costs associated with lower than anticipated quality of service could be high. In addition, factors such as litigation, reputation, and guarantees may be inadequate to insure that consumers do not receive low quality services. If these types of market forces do not provide professionals with an incentive to provide high quality services, licensing may be an effective alternative to an unregulated market.

Assuming there are significant benefits from licensing, they should be weighed against the costs, such as higher prices, that are usually associated with licensing. Mandatory entry requirements and business practice restrictions increase the cost of providing professionals' services and, as a result, increase prices as well. In the dental profession alone, the cost to consumers of restrictions on the use of dental auxiliaries was approximately seven hundred million dollars in I982.[3] Because sixty occupations are licensed by most states, the aggregate cost to consumers of occupational licensure is likely to be very substantial.

Other studies find consumer costs of similar magnitude for business practice restrictions in other licensed professions. One staff report by the

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Representatives. State of Texas (March 13. 1989); Comments of the staff of the Federal Trade Commission's Bureau of Competition re South Carolina Board of Architectural Examiners, Presented to the Legislative Audit Council of the State of South Carolina (March 13, 1989); Comments of the staff of the Federal Trade Commission's Bureau of Economics re Statutes and Regulations Concerning Agencies/Licensing Boards of Six Building-Related Trades in South Carolina, Presented to the Legislative Audit Council of the State of South Carolina (December 7, 1987).

[3] Liang and Ogur (1987), p. 2.

FTC's Bureau of Economics,[4] for example, found that the average price for certain eye care services was approximately 33 percent higher in cities where restrictions prevent both advertising and commercial practice. An American Association of Retired Persons report estimated that in 1983 the cost of restrictions which prevent the commercial practice of optometry was over one hundred million dollars in California alone.[5] We estimate that the national cost of optometric commercial practice restrictions might be as high as five hundred million dollars.[6]

In addition to its costs, licensing does not necessarily increase the quality of professionals' services. Many factors affect the quality of service, and licensing can only control some of these factors. For example, both the time a contractor spends in informal hands-on training and the time he spends in preparatory classes for a written licensing test contribute to the quality of service he provides. Individuals who are required to pass a written contractors' license exam may spend more time in license exam schools and less time in hands-on informal training. It is not clear that the quality of contractors' services will increase as a result of instituting written licensing exams. Moreover, many business practice restrictions, such as advertising, have been shown to be unrelated to the quality of professionals' services. Indeed, the bulk of the studies that measure the impact of certain licensing restrictions on quality find little, if any, quality

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[4] Bond (1980).

[5] AARP (1986), p. 16

[6] See pp. 32-33.

enhancement.' Healey, for example, found that restrictions on the use of paraprofessionals in clinical laboratories did not improve the quality of service received by consumers.[8]

Even in the situations in which licensing increases the quality of the licensee-provided service, consumers are not necessarily better off. Price increases due to licensing may cause some consumers to "do without" the service, or to "do it themselves." Rather than hiring an electrician, for example, some consumers decide to do their own electrical repair work. Such substitution may result in a decrease in the average quality received by consumers. One study which examined this issue found that stricter entry requirements for electricians "are significantly associated with a rise in the rate of death from accidental electrocution." [9]

Given the problems associated with licensing, alternatives should be considered before licensing is adopted. No government action may be the best response in many cases, since the benefits of licensing may be small and the costs significant. Less restrictive alternatives should also be considered, because they may provide greater benefits to consumers at a lower cost. Certification, for example, provides consumers with the option of choosing a certified, higher price professional or a lower price,

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[7] See Martin (1982). Paul (1982). Bond (1980), Cady (1976), and Healey (1973). In fact, one study found that quality was actually higher in cities without advertising restrictions. See Kwoka (1984), pp. 215-216.

[8] Healey (1973).

[9] Carroll and Gaston (1981). p. 963.

noncertified professional.[10] This system allows consumers greater freedom of choice and may provide benefits on a par with licensing.

Finally, although professions may have superior technical expertise in establishing and evaluating restrictions designed to raise quality, professionals often have a financial interest in self regulation. If some form of regulation is necessary, then it may be better for consumers if an outside body, rather than the profession, is responsible for administering the regulations.

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[10] For example, individuals can choose an accountant or a certified public accountant to help them with their tax returns.

I. Introduction

Nearly one thousand occupations are currently regulated by some or all of the fifty states.[11] In most cases the regulatory process is controlled by members of the profession, who claim that self-imposed restrictions are in the public's best interest.[12] Although the professions may seek to benefit consumers, the possibility of a conflict of interest exists. The regulators, in many cases, have a financial interest in the profession they are regulating. Since professionals' self-interest may not coincide with the public's best interest, many have come to regard self-regulation with growing skepticism.[13] This study examines current economic theory and empirical research on the costs and benefits of occupational regulation. We identify factors which determine (1) whether regulation is likely to be beneficial and, if so, (2) the optimal form of regulation in any particular case.[14] Since the benefits and costs of regulation depend on the conditions in the particular market being examined, it is important to consider the costs and benefits of any licensing proposal on a case by case basis. In some instances it may be

[11] Over 800 occupations are licensed by one or more states. Berry (1986), p. 379. The remaining occupations are either certified by, or registered with, the state.

[12] As an extreme example, the American Bar Association's earliest Canons of Professional Ethics stated that a lawyer's duty to act in a client's best interest extends "even to loss of life itself."

[13] See Young (1987), Rhode *(1985),* and Lieberman (1978) for a few examples of the current scholarship in this area.

[14] For example, it may be beneficial to regulate health care professionals, but the current regulatory process may be an inefficient means of doing so.

advantageous to include members of the public on the boards that undertake the task of regulating a profession.

Section II provides an introduction to occupational regulation in the United States. A brief historical review is presented and the current state of regulation is examined. Section III discusses the rationale for regulation of professional services. It identifies the characteristics of the market for professional services that (in the absence of regulation) might lead to a nonoptimal combination of price, quantity, and quality. Consumers' and producers' demand for regulation is also discussed in this section, along with the theories that seek to explain the existence of regulation. Section IV examines the theoretical and empirical findings on the potential benefits and costs of licensing regulations governing mandatory entry requirements and regulations governing the business practices of professionals. Section V analyzes alternatives to licensing, such as certification and output monitoring. Section VI discusses the current status of some attempts at occupational licensure reform. Section VII presents the main conclusions of the study.

II. Occupational Regulation in the United States

Regulation of the professions can be traced to the Code of Hammurabi in ancient Babylon and the guilds in medieval Europe.[15] In the United States, the pace of occupational regulation accelerated in the 1900's.

[15] It is beyond the scope of this paper to examine the complete history of occupational regulation and the factors behind its prevalence or lack thereof in certain time periods. See Young (1987), pp. 9 to 14, for a brief historical overview of occupational regulation.

Between 1911 and 1915, 110 statutes licensing 24 occupations were enacted. By 1973, more than 300 different occupations were licensed, with an average of 39 licensed occupations per state.[16] Today, over 800 occupations are licensed by at least one of the 50 states and nearly 1,000 occupations are under some form of regulation.[17]

An examination of the various occupations that are subject to regulation reveals that about sixty occupations are licensed by most states. Occupations falling in this category include architects, attorneys, engineers, real estate brokers and salesmen, and numerous health-related occupations. Beyond this core group of licensed occupations, the type of occupations that are licensed varies from state to state. A few states require licensing of boxers, butter makers, falconers, geophysicists, and horticulturists. California licenses more occupations than any other state. This state licenses 132 occupations, compared to 52 licensed occupations in Iowa.

Regulation governing occupations in the United States takes a variety of forms. Enacted at the state level, licensing is the most common regulatory framework. Alternatives, such as certification, also exist, but are not as prevalent.[18] In a licensing system, boards sanctioned by the state typically set entry requirements, enact rules governing conduct, and discipline individuals for rule violations. Requirements for obtaining a license vary from occupation to occupation, but usually include some combination of the following: (1) prescribed formal education; (2) experience or apprenticeship;

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[16] Martin (1980).

[17] Berry (1986), p. 379.

[18] See pp. 43-52 for a discussion of alternative regulatory frameworks, such as certification and output monitoring.

(3) an examination; (4) good moral character; and (5) citizenship or residency. These requirements may also vary from state to state. In the real estate profession, for example, Washington, D.C. had no education or experience requirements in 1983, while Pennsylvania required 240 classroom hours and three years of sales experience for brokers.[19] Rules governing conduct may limit the extent to which members can compete (e.g., restrictions on advertising) or specify mandatory quality standards to which members must adhere. Rule violations constitute grounds for disciplinary actions, which vary from admonishment to revocation of a license. Since licensing boards usually consist of members of the profession, self-regulation is normally present.

III. Rationale for Occupational Regulation

A. Market Failure

The pressure of competitive market forces will usually bring about an optimal combination of price, quantity, and quality. Under certain circumstances, however, market forces may not produce a desired outcome. When such distortions exist, a "market failure" is said to be present. For reasons discussed below, some believe markets for professionals' services may be prone to market failure, requiring intervention in the form of regulation.

Even if a market failure occurs, however, this does not imply that regulation is an optimal remedy. There are several market responses and

[19] Staff Report by the Los Angeles Regional Office of the FTC, "The Residential Real Estate Brokerage Industry, Volume 2" (1983), p. 1 and Table A in Appendix B.

nonmarket responses other than regulation which mitigate the effects of market failure, such as reputation and the threat of litigation. Even if distortions persist in a market, regulation by licensing may not be an effective solution. Licensing, although aimed at increasing professionals' quality, may not actually do so. In addition, even if professionals' quality increases as a result of licensing, the average quality of service received by consumers may decrease if consumers switch to lower cost alternatives or choose to do without the service. Moreover, less restrictive regulatory alternatives, such as certification, may achieve the desired results at a lower cost.[20]

Thus, to determine whether government intervention is beneficial, one must consider the benefits and costs of alternative policy options in any instance of potential market failure. In this section we identify and discuss three types of potential market failure that may be present in some occupations. In addition, we also examine the effectiveness of various responses to problems caused by potential market failure.

1. Asymmetric Information on Quality

One potential source of market failure in professional markets is asymmetric information on quality.[21] Such a failure may occur if it is more difficult for consumers than for the sellers to determine the quality of a service offered. In the extreme case, the quality of a service may not be

[20] These issues will be explored in greater detail in subsequent sections.

[21] See Young (1987), Wolfson (1980), Leland (1979), Leffler (1978), Benham (1975), Akerlof (1970), Arrow (1963), and Moore (1961).

evaluated even after a purchase.[22] For example, the plaintiff in unsuccessful litigation may be unable to determine if his case failed due to its intrinsic lack of merit or due to his lawyer's incompetence. If consumers base their willingness to pay for a particular service on the "average" quality they expect to receive, there may be an incentive for any one professional--who is in a position to evaluate the quality of his services — to allow the quality of his service to deteriorate, since consumers could not detect the difference. Thus, if professionals cannot capture the gains associated with difficult-to-detect, higher quality service, the market may be flooded with low quality service.[23] In the limit, the market for "high" quality services could fail.[24] Asymmetric information on professionals' quality thus represents a potential market failure that, if uncorrected, could result in a loss in social welfare.

There are, however, market and nonmarket responses which can reduce a market failure caused by asymmetric information on quality. Tort law is an example of a nonmarket factor which acts as a deterrent to the provision of substandard quality. If a professional is negligent or incompetent and the

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[22] Goods or services can be categorized as having predominantly "search", "experience", or "credence" characteristics. These categories refer to the degree of difficulty that consumers have in ascertaining the quality of a good or service. For example, if the quality of a professional is revealed to the consumer after search, these services possess "search" characteristics. In some cases, however, the consumer cannot evaluate the quality of a professional until after he has received the services. These markets are said to have "experience" characteristics. In the extreme case, a consumer will not be able to determine the quality of service even after it has been rendered. These markets display "credence" characteristics. Some professional service markets may fall into this last category. See Blair and Kaserman (1980) for a more detailed discussion of this issue.

[23] See Lynch (1986) and Leffler (1978).

[24] Akerlof (1970).

provision of service causes harm to others, injured parties can seek recourse in a court of law. The threat of litigation provides the professional with an incentive to provide higher quality service. One problem with litigation serving as a mechanism to insure quality, however, is that the consumer must be able to evaluate to some extent the quality of the service received. This could be difficult in some professional service markets. In addition, if a single mistake imposes significant harm on consumers, policy makers may be reluctant to rely solely on this market response to protect consumers.[25] Although the threat of litigation should increase quality, it may not eliminate the asymmetric information market failure completely.

The use of market responses such as guarantees can also lessen the potential for information-based market failure problems. A termite extermination service, for example, may guarantee that a home will be free of termites for a certain period of time. The guarantee serves as a signal to the consumer of the provision of high quality. Guarantees, however, may not always be a viable response to market failure problems. In situations where the actions of the consumer also affect the end result (e.g., legal services or real estate), a professional may not be willing to offer guarantees. In fact, the issuance of a guarantee in these cases may provide the consumer with an incentive to take less preventive action than he would have otherwise.[26]

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[25] It is important to note, however, that reliance on licensure does not guarantee that mistakes that will not occur.

[26] This is what economists refer to as a situation involving "moral hazard". See Shavell (1979) and Holmstrom (1979) for a detailed discussion of the moral hazard issue.

In addition to the use of guarantees, reputation serves as a "signal" of quality to consumers. As long as some consumers can evaluate quality, reputations may be formed. Individuals may learn of a professional's reputation from personal experience, friends, family, other professionals, advertisements, or trade names. Doctors, for example, have an incentive to refer clients to specialists with a good reputation. To the extent that reputation is an effective signal of quality and practitioners have an incentive to protect their reputations, more information is provided to consumers and market failure is less likely.

A market will even supply high quality (although at higher prices) when consumers cannot evaluate quality prior to purchase, as long as reputations signal quality to consumers. Shapiro[27] shows that during the period in which firms establish reputations as high quality providers, consumers are uncertain of their quality and pay a correspondingly lower price. After firms establish reputations, they charge a higher price for high quality, reflecting the cost of establishing their reputations. Thus, although some distortions due to imperfect information persist, the problem of quality degradation is mitigated when professionals can establish reputations as high quality providers.

The provision of information by outside parties may also reduce any market failure problem. Information on quality is valuable to consumers. Producers, recognizing the need for information on quality, may supply it to consumers who are willing to pay for this service. Publications such as Consumer Reports inform consumers on quality and serve to attack the market failure at its source. However, for many professionals' services it

[27] Shapiro (1983).

would be costly to attest to the quality of numerous professionals. In addition, any one individual may be unwilling to pay for information if he thinks that once it is available, he will be able to obtain it for free. This situation, referred to as a "free rider" problem, can lessen the incentive to supply potentially valuable information. Nonetheless, the existence of AAA's Approved Auto Repair Services Program[28] indicates that, at least in professions such as auto mechanics, it is profitable for independent firms to offer information on quality to consumers.

In sum, there are numerous market and nonmarket responses that tend to lessen information-based market failures. In determining the extent to which quality degradation is likely to occur, one must consider whether consumers have less information on the quality of a service than providers of the service, and the degree to which the various market and nonmarket responses are likely to be effective in mitigating such information problems.

2. Externalities

Another type of market failure could occur if professionals or consumers do not take into account the effect of their sales or purchase decisions on "third parties" not directly involved in a transaction.[29] For example, a

[28] This program, begun in 1975 when two of AAA's member clubs started offering the service, offers a list of ,,approved" repair locations to members. Today, 41 of the 160 AAA member clubs have an Approved Auto Repair Services Program. In order to be approved, a repair facility must meet certain quality requirements. The AAA investigates, for example, a repair facility's record with the local Better Business Bureau, local consumer protection organizations, and a sample of past customers. Test cars are also used occasionally to monitor the quality of service provided.

[29] See Wolfson (1980) and Leffler (1978).

consumer may prefer a less qualified, lower priced doctor for treatment of what appears to be a minor illness. An incompetent doctor, however, may fail to diagnose a contagious disease, thus contributing to an epidemic. Other markets where externalities may exist include architecture and engineering. The potential effect of poor design on public health and safety could be large in these markets. The collapse of a bridge or giant skyscraper, for example, could injure many parties that were not involved in the purchase decision. A further example of such third party effects arises in the accounting profession. The users of the accountant's services (e.g., stockholders) are third parties since they are not the individuals who hire and pay the accountant.[30] To the extent that consumers or firms do not take into account the effect of their choice of quality on others, an ,,externality" may be present and a nonoptimal level of quality could result.[31]

As mentioned above, tort law and reputation act as deterrents to the provision of low quality. Potential investors, for example, may be willing to pay more for the stock of a company that uses an accounting firm with a good reputation. Firms who realize that consumers value high quality independent accountants have a greater incentive to hire accountants that have a good reputation. In addition, individuals who employ architects and

[30] The potential for this type of market failure may be present in the provision of some public services, as well. The individuals who hire teachers, for example, are not the students who consume (or the parents who via tax payments pay for) their services.

[31] An externality could also occur with regard to the quantity, rather than the quality, of a given service purchased. Individuals' decisions to purchase vaccines for infectious diseases may be one example of this type of externality. To the extent that individuals do not take into account the effect that their vaccination has on others, fewer individuals get vaccinated than is socially desirable. Since the majority of occupational regulation is enacted to increase the quality, rather than the quantity, of professionals' services purchased, we will not focus on the quantity externality in this paper.

engineers could be held liable for harm caused by faulty design thereby providing employers with an incentive to choose high quality professionals. Tort law and reputation thus lessen the potential market failure due to externalities.

Reputation and litigation, however, may not eliminate this type of market failure problem in all cases. This is more likely to be true if the third parties involved are not in a market relationship with the decision maker, unlike the firm and potential investor discussed above. A sick person who could have a contagious illness, for example, may not have a sufficient incentive to choose a reputable doctor. If the more reputable doctor's treatment only slightly reduced the symptoms but significantly reduced the likelihood of spreading a disease, a sick person may be reluctant to pay for the "socially desirable" level of treatment. In addition, in some cases, spread of a disease may not be able to be attributed to any one person. Tort law would be ineffective if parties who are harmed cannot determine the source of the harm. Thus, although market and nonmarket responses are likely to be effective in a large variety of cases, third party quality concerns may not be adequately addressed in all situations.

3. Dual Role of Professional as Diagnostician and Treatment Specialist

A third type of market failure may occur when a professional performs the tasks of both "diagnosis" and "treatment."[32] Under these circumstances, the professional could have an incentive to diagnose the problem as one that requires more treatment than is actually necessary (i.e., the diagnostician can

[32] See Scheffman and Applebaum (1982) and Beales (1980).

shift out the demand curve for self-delivered treatment). The potential for this type of market failure problem is greater when:

(a) There are third party payers.[33] In this type of situation, the consumer may have less incentive to determine if the treatment prescribed was excessive.[34]

(b) The pricing structure is based on the amount of service provided or hours worked.35 For example, a mechanic who is reimbursed based on the number of hours worked may have a greater incentive to claim that additional work on a car is needed than a mechanic who receives a weekly salary, all else equal.

(c) The service in question is technically complicated and purchases are infrequent. In these situations the consumer's diagnostic skills are less developed and the consumer is less likely to learn if the treatment prescribed is excessive.[36]

Markets for professionals' services can possess a combination of the characteristics described above. In the health care market, for example, there are third party payers, the service is technically complicated, and purchases are infrequent. Evans and Wolfson found some evidence of overprescription of treatment in this market.[37] Other examples of occupations in which this type of market failure may be common are car

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[33] Dranove (1988).

[34] To the extent that excessive treatment could harm consumers, they have an incentive to limit its use.

[35] Dranove (1988).

[36] Dranove (1988).

[37] Evans (1980), p. 252.

repair and television repair. According to a staff report by the FTC's Bureau of Economics:

> As long as the diagnosis and treatment are performed as one package, there is no way of knowing whether the treatment paid for was actually needed. The television set may not have been working because of a faulty $2 switch or a $200 picture tube, but if the repairman asserts it was the latter, the consumer has no way of checking this. Thus, it is not surprising that unnecessary repairs are a major problem in these situations. It has been estimated, for example, that fifty-three percent of all auto repairs are unnecessary.[38]

This type of market failure is more complex than the two types of market failure discussed above. If there is significant competition in a market and consumer search is possible, overprescription of treatment may not even arise. For example, when professionals can diagnose a problem prior to entering into a "treatment" relationship with the client, competition for the opportunity to "treat" the client is likely to occur. The fact that a professional can perform both diagnosis and treatment roles does not imply that he will. The use of free estimates is an example of competition to "treat" clients or provide services. If it is possible for consumers to shop around and obtain opinions from a number of professionals prior to making the treatment purchase decision, then the over-treatment problem may be mitigated somewhat. In an experimental study[39] of a market with consumer

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[38] Staff Report by the Office of Policy Planning and Evaluation of the FTC, "Consumer Information Remedies Policy Session" (1979), p. 249.

[39] Plott and Wilde (1982). In their hypothetical example a consumer's car is overheating due to either a rusted radiator or a defect in the circulatory system in the engine block. Three options are available: (1) do nothing; (2) flush the existing radiator; (3) buy a new radiator. Diagnosis is based on the amount of rust in a water sample from the radiator. As the amount of rust in the sample increases, the probability of a rusted radiator increases. The authors compare the situation in which consumers are knowledgeable about the relevant probabilities and thus make their own diagnosis to the situation in which consumers must rely on professionals for information on the probabilities as well as a diagnosis.

search and potential separation of diagnosis and treatment, Plott and Wilde found that competitive market forces could effectively reduce the professionals' incentive to overprescribe treatment. Sellers who deviated from the relatively uniform recommendation for treatment were penalized in terms of lower sales. Absent collusion among sellers, telling the truth was the sellers' best strategy.[40]

Depending on the characteristics of the professional market, separation of diagnosis and treatment may or may not be possible. If diagnosis is complicated or consumer search costs are high, the separation of tasks may not be efficient. This could occur for some services in the health care sector. It may be necessary, for example, to have an operation immediately after exploratory surgery in some cases.

In situations where separation of diagnosis and treatment is not feasible, consumers may nonetheless, realize the potential for abuse and adjust their behavior accordingly. In addition, reputations can provide a signal to consumers. Individuals can learn from personal experience, friends, or family that certain professionals have a reputation for prescribing excessive treatment. Consumers do sometimes learn of instances of abuse and spread the word around, alerting other consumers to professionals with bad reputations. Leffler states that "[o]ver time, through direct experience and the experience of others, through publicity given to research on the value of health care, and through reports of 'unnecessary' surgery, patients will learn to reduce their reliance on the advice of self-interested professionals."[41]

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[40] The authors acknowledged, however, that the results may differ if consumer search is costly, as it is in many professional markets.

[41] Leffler (1980), p. 294.

In addition, different pricing and organizational arrangements may also arise in an attempt to alleviate this form of potential market failure.[42] The emergence of Health Maintenance Organizations (HMOs), for example, may be a case in point. Since the doctor or organization receives a specified amount per patient under a HMO system, the incentive for the doctor to overprescribe treatment is lessened.[43] A recent study of HMOs, based on data from 25 SMSAs, found that the growth in HMOs has indeed led to lower hospital admission rates and lengths of stay.[44] Employee health plans' requirement that employees obtain a second opinion for non-emergency operations[45] may be another example of market forces at work to lessen this potential market failure. While employees may not have an adequate incentive to determine if an operation is warranted, employers — who pay for the health care coverage — do. Thus, provisions such as requiring second opinions, may be written into a contract to guard against potential overprescription of treatment.

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[42] "As a supplement to the untying of diagnosis and treatment, it may be necessary to devise contracts that would improve the incentives of the diagnostician to act in the buyer's interest." Staff Report by the FTC's Office of Policy Planning and Evaluation "Consumer Information Remedies Policy Session" (1979), p. 252.

[43] Evans (1980), pp. 257-258.

[44] McLaughlin (1987), p. 195. This study also found that the growth in HMOs led to higher hospital expenses per adjusted patient-day and per admission. One explanation offered by the author for this somewhat unexpected result is that lower admission rates are due to a decrease in discretionary cases. The nondiscretionary, more severe admissions presumably require more resource-intensive care, thus increasing expenses.

[45] Kramon (1988).

4. Summary

The potential for market failure may exist in some markets for occupational services. Although asymmetric information on quality is the usual justification for occupational regulation, other potential market failure problems might also arise due to externalities and the dual role of the professional as diagnostician and treatment specialist. Since various market and nonmarket responses have arisen which can mitigate the market failure problems, the extent to which the degradation of quality or overprescription occur depends on the characteristics of the particular professional service market (e.g., are third party payers present?) and the effectiveness of market and nonmarket responses in lessening these problems.

B. The Demand for Occupational Regulation

In this section we review the two reasons most frequently discussed in the literature for occupational regulation — the "public interest" and "capture" theories of regulation — and discuss how they relate to market failure.

1. Consumers' Demand for Regulation: The Public Interest Theory

One theory is that consumers demand regulation to correct the problems caused by market failure.[46] For example, in order to guarantee high quality

[46] See Moore (1961) for a general discussion of consumers' demand for occupational regulation.

medical services, consumers may argue that health care professionals should possess mandatory education and experience requirements.[47] Policy makers, responding to pressure from their constituents, could enact such legislation. The public would then presumably benefit from the provision of higher quality medical services.

One reason why consumers may fail to demand regulation that would be in their best interest, however, results from a version of the free rider problem. Professionals' services are often purchased infrequently by consumers. Thus, an individual consumer may incur potentially high costs learning about a particular profession and determining which type of regulation is in his best interest. Also, the costs of taking action may be high.[48] The benefits associated with enactment of legislation, on the other hand, do not accrue solely to the individual, but are likely to accrue in large part to others. Similar to the "free rider" problem discussed above, this reduces the incentive for an individual to bear the cost of initiating legislation and encourages them instead to wait for someone else to change the law. In addition, if the purchase represents a relatively small expenditure, the benefit to an individual consumer is especially low. As a result, consumers rarely demand occupational regulation.[49] Ellen Hume, a researcher for the National Clearinghouse on Licensure Enforcement and

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[47] See Leffler (1978) and Arrow (1963) for a discussion of consumers' demand for regulation of medical professionals.

[48] There are likely to be large costs associated with informing and organizing a large group of consumers to take action. Many individuals may not join the group because they feel that others will take action.

[49] See Young (1987), p. 24 and Rottenberg (1980), p. 6.

Regulation states "[r]arely does a consumer go before the legislature and demand that a group be regulated."[50]

Policy makers, however, may nonetheless respond to the latent demand of consumers. The public interest theory of regulation claims that politicians will act in the public's best interest to lessen problems caused by market failure. According to this scenario, a benevolent government enacts regulation that attempts to make consumers better off.

Critics of the public interest theory, by contrast, argue that professionals' self-interest is the major force behind occupational regulation. Simon Rottenberg, a scholar in the area of occupational regulation, states that licensing "has been carried far beyond what serves the public interest. More often than not, it's an instrument for increasing the income of persons who practice in the profession, rather than an instrument for protecting the citizenry."[51]

2. Professionals' Demand for Regulation: The Capture Theory

Professionals, rather than consumers, often expend considerable resources in an attempt to convince legislators that regulation will benefit the public.[52] The capture theory of occupational regulation argues that regulation is a response to professionals who seek to protect themselves

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[50] Lochhead (1988), p. 40.

[51] Lochhead (1988), p. 41.

[52] See Benham (1980) for a detailed discussion of factors affecting professionals' demand for regulation.

from competition and thereby increase their incomes.[53] Regulation designed to limit entry will decrease supply and increase prices. If demand is inelastic, then higher prices will lead to higher incomes. In addition, some authors have argued that professionals will demand regulation as a form of career insurance. In particular, if regulation insulates professionals from competition, they are less likely to be driven out of the market and forced to train for another career.

Professionals' demand for regulation is less likely to be affected by the type of free rider problem faced by consumers. Professionals have a greater interest in and knowledge of regulation affecting their profession than most consumers, and a greater ability to band together. Thus, the cost of mobilizing behind a particular form of regulation is relatively less for professionals. In addition, the benefits of such activity are likely to be higher. Individuals who derive their income from the practice of a profession are more likely to be similarly affected by regulation than consumers who use a service infrequently.

In an empirical study of regulation in the medical profession, Paul[55] found that physicians were the impetus behind enactment of licensing legislation. In addition, Paul asserts that "licensing legislation was the result of organized physicians employing the political system for limiting entry and the concomitant increasing of return to incumbent medical practitioners."[56] Begun, Crowe, and Feldman's study of the optometric

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[53] See Peltzman (1976), Stigler (1971), and Friedman (1962).

[54] Young (1987), p. 26-27.

[55] Paul (1984).

[56] Paul (1984), p. 27.

profession also found support for the claim that regulation is actively sought by professional groups. They state that "[t]he findings help to explain why state regulatory policies often appear to benefit the regulated occupations."[57]

The benefits may take the form of higher incomes for members of the profession. Researchers have noted the income enhancing effects of licensure and its associated restrictions.[58] Muzondo and Pazderka, for example, found that restrictions associated with licensing increased the average earnings of professionals in Canada by 26.9 percent.[59] It is, therefore, not surprising that the majority of occupational regulation is demanded by professionals,[60] who have a greater stake in the outcome of such regulation.

3. Summary

Both consumers and professionals may have incentives for demanding regulation. Consumers, however, seem rarely to be the moving force behind occupational regulation, possibly because of free rider problems and infrequent purchases. Professionals, on the other hand, routinely demand regulation, typically in the form of licensing laws. Whether this is due to the income-enhancing effects of licensure or a strong concern for the public's well being is unclear, although much recent research suggests the

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[57] Begun, Feldman, and Crowe (1981), p. 229.

[58] See Muzondo and Pazderka (1983), Shepard (1978), and Leffler (1978).

[59] Muzondo and Pazderka (1983), p. 412.

[60] See Young (1987), p. 24 and Rottenberg (1980), p. 4.

former. Regulation that results in higher professional incomes is not necessarily inconsistent with the public interest. Thus, policy makers may be responding both to the latent demand of consumers and pressure from professionals seeking personal gain.[61]

IV. Benefits and Costs of Licensing

Regardless of whether consumers or professionals demand regulation, the rationale for occupational regulation has typically been to protect the public's health and safety by guaranteeing a mandatory quality standard. Many claim that regulations governing mandatory entry or education requirements and regulations governing the business practices of professionals are enacted to achieve this goal. In this section we examine the existing research to determine if occupational regulation by licensure Increases quality.

A. The Effect of Licensing on Quality

1. Mandatory Entry Requirements

The goal of licensing legislation is often to increase the quality of professionals' services by specifying mandatory entry requirements. Thus, by attempting to control the quality of inputs into the production of professionals' services, licensing attempts to improve the quality of these

[61] See Peltzman (1976) for a discussion of policy maker's response to varied interest groups.

services. Such "input restrictions" include education or experience requirements and limitations on the use of paraprofessionals. Whether or not output quality will increase as a result of restrictions on inputs is unclear. Moreover, even if licensing is effective in insuring that entrants are qualified, the continued competence of existing members of the profession is not necessarily guaranteed.

The theoretical literature indicates that input restrictions will not necessarily increase the quality of professionals' services,[62] because many factors (not all of which are controlled by licensing) affect the quality of service rendered.[63] Since the professional is free to adjust the level of inputs which are not controlled by licensing (e.g. the amount of time a professional spends with a client), a mandated increase in one or several inputs does not necessarily imply that quality will increase. Individuals who are required to pass a written contractor's test, for example, may spend less time in informal hands-on training and more time in contractors' license

[62] See Scheff man and Applebaum (1982) for a discussion of this issue.

[63] Some authors, who do not allow substitution among inputs, have found that licensing does increase the average quality of professionals' services. See Metzger (1988), Shapiro (1986), and Leland (1979). Leland's model did not view licensing as a restriction on inputs, but as a restriction on the innate quality of the professional. Quality will increase if restrictions eliminate the low quality providers. The implicit assumption that regulators can evaluate the professionals' quality, however, is questionable. Moreover, licensing usually takes the form of input regulation, so Leland's results may not hold in most instances -- even if regulators can evaluate quality. Increasing one input may lead to reductions in other inputs, possibly lowering the overall quality of service. Metzger and Shapiro allow service quality to be influenced by an input, such as education and the innate ability of the individual. In order to obtain a license an individual must fulfill certain education requirements. Since substitution among inputs is not possible in this framework, however, the average quality of professionals' services must increase when licensing is instituted. To the extent that quality-enhancing effects of licensure are built into these models, they overstate the desirability of licensing.

exam schools. If licensing requires that contractors pass a written exam, they may do so at the expense of time formerly spent in informal hands-on training. Although a written test requirement may be expected to increase the quality of contractors' services, we cannot be certain that it will necessarily achieve this result.

The empirical findings64 indicate that mandatory entry requirements of licensing cannot necessarily be relied upon to raise the quality of service or decrease the overprescription of treatment.[65] One staff report by the FTC's Bureau of Economics,[66] for example, examined the relationship between licensing and overprescription of services. Television sets with known defects were used to determine the incidence of parts fraud in three locales: Washington, D.C., which does not regulate repairmen; New Orleans, Louisiana, which licenses repairmen; and San Francisco, California. In California, individuals who operate television repair facilities must register with the state and a government agency investigates consumers allegations of fraud by using a team of experienced repairmen equipped with televisions with known defects. The study found that "the Louisiana Licensing Law does not protect the consumer from what has been defined as 'parts fraud'."67 The incidence of parts fraud was approximately 20 percent in San Francisco, compared to 50 percent in New Orleans and Washington, D.C.68 Thus,

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[64] Unfortunately, there are not many studies of the effect of minimum entry requirements, or licensure per se, on quality of service.

[65] See Carroll and Gaston (1981), Holen (1978), and Phelan (1974).

[66] Phelan (1974).

[67] Parts fraud consists of "replacing parts unnecessarily or charging for parts not actually replaced." Phelan (1974), p. 46.

[68] Phelan (1974), p. 31.

licensing may not be an effective solution to potential overprescription of treatment problems.

Although quality of television repairmen was not examined in the preceding study,[69] other studies do examine the quality issue. Carroll and Gaston,[70] for example, found that states requiring an oral exam reduced the density of electricians in the state and lowered the quality of electricians' services received by consumers. Another study[71] which examined the effect of mandatory entry requirements of licensing in the dental profession, however, found that licensing did increase the quality of professionals' services. Holen found that more stringent entry requirements[72] were associated with a lower rate of dental neglect. Dental neglect was measured as the amount of untreated dental disease relative to total dental disease. This study, however, did not indicate whether entry requirements of licensing were, on balance, beneficial. Holen qualifies her results by noting that "[s]ince costs are not estimated, however, or full benefits, judgment as to whether consumers achieve higher levels of welfare because of licensing must await further research."[73]

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[69] The authors note that the quality of repairmen could be examined by using a television with a complicated malfunction. Since "[a] test of this kind would have increased significantly the resources and time required for the completion of this study, ... the potential differences in quality among jurisdictions were not examined." Phelan (1974), p. 22.

[70] Carroll and Gaston (1981).

[71] Holen (1978).

[72] The stringency of entry requirements was determined by a number of factors, such as whether completion of a gold foil restoration was required in the licensing exam.

[73] Holen (1978), p. vii.

2. Business Practice Restrictions

In addition to entry requirements, many argue, regulations governing the business practice of professionals are also enacted to increase the quality of professionals' services. Restrictions on advertising, branch office restrictions, and trade name restrictions are examples of these types of licensing regulations. While a few studies indicate that higher quality levels may result from such licensing restrictions,[74] a majority of the work to date finds quality to be unaffected by licensing or business practice restrictions associated with licensing.[75] In some cases quality actually decreases.[76] Kwoka,[77] for example, finds that the average quality of eye care is lower in regions with restrictions on advertising.

The following table summarizes research regarding the effect of licensing on quality. Since the results depend, at least in part, on the type of restrictions examined and the quality measure used in each study, it is possible to find studies of the same profession indicating both positive and neutral quality effects. While a few studies have demonstrated a positive quality effect for certain restriction, most research suggests licensing or

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[74] Feldman and Begun (1985) and Martin (1982). Martin found that requirements for the issuance of a reciprocal license had a positive effect on quality. Feldman and Begun found that practice restrictions in optometry raised the quality of eye exams. The length of eye exams and the number of procedures performed were used to proxy output quality in this study.

[75] See Young (1986), Paul (1984), Bond (1980), Cady (1976), and Healey (1973). Healey, for example, found that restrictions on the use of paraprofessionals in clinical laboratories did not affect the quality of service received by consumers.

[76] See Kwoka (1984), and Muris and McChesney (1978).

[77] Kwoka (1984).

restrictions governing the business practice of professionals do not improve the quality of professionals' services.

QUALITY EFFECTS TABLE

Occupation	Type of Restriction	Effect on Quality	Author
Accounting	Licensing	Neutral	Young (1986)
Dentistry	Gold Foil Restoration in the Exam & other restrictions[78]	Positive	Holen (1978)
Electricians and Others[79]	Oral Exams & Prior Occupational Experience	Negative	Carroll & Gaston (1981)
Legal	Advertising	Negative	Muris and McChesney (1978)
Optometry	Advertising & Commercial Practice	Neutral	Bond (1980)
Optometry	Advertising	Negative	Kwoka (1984)

[78] Other measures of licensing restrictiveness included, for example, whether or not the state participates in a simultaneous examination arrangement, whether or not the state has reciprocity arrangements, and whether or not the state recognizes the certificate of the National Board of Dental Examiners.

[79] Other professions examined included dentists, plumbers, optometrists, sanitarians, real estate agents, and veterinarians. In all cases, the results showed an inverse relationship between restrictions that reduce the density of professionals per capita and the quality of service received by consumers.

QUALITY EFFECTS TABLE (CONTINUED)

Occupation	Type of Restriction	Effect on Quality	Author
Optometry	Commercial Practice, Advertising, & Continuing Education	Positive[80]	Feldman and Begun (1985)
Laboratory Personnel	Licensing	Neutral	Healey (1973)
Pharmacy	Advertising	Neutral	Cady (1976)
Pharmacy	Nonissuance of Reciprocal License, Citizenship, & Reciprocity Requirements	Mixed[81]	Martin (1982)
Physician	Licensing	Neutral	Paul (1984)

[80] There a number of differences between this study and the two previous optometry studies. For example, this study uses state, as opposed to city data, and includes a restriction, continuing education, that is not considered in the other studies. The most important difference, however, appears to be that the Kwoka and Bond studies classify areas on the basis of whether or not restrictions are in effect, while the Feldman and Begun study classifies areas on the basis of whether or not restrictions are present in laws or codes of ethics. Since enforcement may vary and instances were found where advertising was greater or less than the laws would imply, the presence of formal restrictions appears to be a less reliable measure of restrictiveness.

[81] The presence of citizenship requirements and requirements for reciprocity had a positive effect, while the nonissuance of reciprocal licenses had a neutral effect.

B. Costs of Licensing

To consider the net effect on consumers, it is necessary to examine the costs of licensing. Numerous costs arise from a system of licensing. First, by specifying mandatory entry requirements and restricting the business practices of professionals, licensing increases the cost of providing professionals' services, and thus increases prices to consumers as well. Second, due to advertising restrictions, professionals may find it advantageous to compete in terms of quality, rather than price. If the cost of enhanced quality competition is greater than the benefits that consumers derive from higher quality, consumers are worse off. Finally, the costs of licensing may be increased when self regulation, rather than regulation by nonmembers of the profession, is present. We now discuss each of these costs issues in detail.

I. Mandatory Entry Requirements

Regardless of whether self-regulation is present, by specifying mandatory entry requirements licensing is likely to increase the cost of providing professionals' services. Costs would increase unless entry requirements are set at or below the level existing in the market prior to regulation. As a result, prices that consumers pay for professionals' services are likely to increase.

Even if the quality of professionals' services increases as a result of mandatory entry requirements of licensing, higher prices may cause consumers to switch to lower cost alternatives or choose to forgo services

completely. Therefore, quality of service actually received by consumers may decrease as the price and quality of professionals' services increase because some consumers become "do-it-yourselfers." For example, one study found that stricter mandatory entry requirements for electricians "are significantly associated with a rise in the rate of death from accidental electrocution." [82]

2. Business Practice Restrictions

The price effects due to business practice restrictions are well documented.[83] A study by Liang and Ogur, for example, found that licensing rules that restrict the use of dental auxiliaries (hygienists and assistants) increased the average price of a dental visit by 11% in 1970 and 7% in 1982.[84] If these price increases are not accompanied by any quality enhancing benefits, consumers are clearly worse off. In their review of existing studies, Liang and Ogur concluded that "for the dental procedures studied, the quality of services provided by auxiliaries is equal to that provided by dentists." [85] Thus, they conclude that "relaxation of restrictions on the number of hygienists that a dentist may employ would benefit consumers by providing the same quality of service at a lower price." [86] The estimated cost to consumers of these restrictions was over one billion dollars

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[82] Carroll and Gaston (1981), p. 963.

[83] See Liang and Ogur (1987), Haas-Wilson (1986), Begun and Feldman (1980), Kwoka (1984), Conrad and Sheldon (1982), Bond (1980), and Benham (1972).

[84] Liang and Ogur (1987).

[85] Liang and Ogur (1987), p. 3.

[86] Liang and Ogur (1987), p. 3.

in 1970 and, despite some states relaxing these rules, remained at approximately seven hundred million dollars in 1982.[87]

Other studies find consumer costs of similar magnitude for business practice restrictions in other licensed professions. The following table summarizes the research regarding the effect of licensing restrictions on price. While the magnitude of the costs observed varies to some extent, these studies show that price increases as a result of licensing are well documented and widespread.

[87] Liang and Ogur (1987), p. 2.

PRICE EFFECTS TABLE			
Occupation	**Type of Restriction**	**% Increase in Price**	**Author**
Dentistry	Reciprocity	15%	Shepard (1978)
Dentistry	Commercial Practice & Use of Auxiliaries	4% [88]	Conrad & Sheldon (1982)
Dentistry	Use of Auxiliaries	11%	Liang & Ogur (1987)
Legal	Advertising	5-11% [89]	Staff Report by the FTC's Bureau of Economics and Cleveland Regional Office (1984)
Optometry	Advertising	25%	Benham (1972)
Optometry	Advertising & Commercial Practice	33%	Bond (1980)
Optometry	Advertising	9-16% [90]	Feldman and Begun (1978) & (1980)
Optometry	Advertising & Commercial Practice	20%	Kwoka (1984)
Optometry	Commercial Practice	5-13% [91]	Haas-Wilson (1986)
Pharmacy	Advertising	5%	Cady (1976)

[88] Dental prices were approximately 4% higher in SMSAs within states having limits on the number of branch offices. Dental prices were also approximately 4% higher, all else equal, in SMSAs with limits on the number of hygienists that can be employed by a dentist.

[89] This range reflects the percentage price increase for a number of routine legal services, including wills, divorces, and bankruptcy cases. For example, price for simple wills were approximately 5% higher in restrictive cities and prices for simple will with trusts were approximately 11% higher.

[90] The percentage increase is dependant on the specification of the model.

[91] This range reflects differences in the specification of the model.

Several studies have examined the effect of restrictions that commonly appear in optometric licensing laws and regulations.[92] One staff report by the FTC's Bureau of Economics[93] in this area found that the average price for certain eye care services was approximately 33 percent higher in cities where restrictions prevent both advertising and limit commercial practice. Furthermore, this study found that "[e]xaminations purchased from optometrists in restrictive and nonrestrictive cities are, on average, of about equal thoroughness."[94]

An American Association of Retired Persons (AARP) report estimated that the cost to consumers of optometric commercial practice restrictions, which tend to impede the development of chains, in 1983 was over one hundred million dollars in California alone.[95] It is difficult to estimate a national cost of these optometric restrictions since it is not known exactly how effective commercial practice restrictions are in the 44 states that have them. Nonetheless, the cost to consumers may be substantial. In 1983, sales in the market for optometric goods and services were over three and one

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[92] See Haas-Wilson (1986), Kwoka (1984), and Bond (1980).

[93] Bond (1980).

[94] Bond (1980), p. 8. The study did note, however, that within the nonrestrictive cities, "[e]xaminations purchased from large chain firms and advertising optometrists are, on average, less thorough than examinations purchased from the nonadvertising optometrists." Bond (1980), p. 8. An index of thoroughness was developed in this study by assigning weights to various tests and procedures employed. Another optometry study used a different measure of quality, time spent in the examination. This study found that overall quality was actually higher in the nonrestrictive cities. Kwoka (1984), pp. 215-216.

[95] AARP (1986), p. 16.

half billion dollars[96] and prices for an eye exam and eyeglasses were eighteen percent higher in markets without chain firms.[97] Approximately eighty-three percent of the United States population resides in states with optometric commercial practice restrictions, so the national cost of these restrictions could have amounted to over five hundred million dollars in 1983.[98]

Authors have also documented the adverse effects on consumers and competition of restrictions on advertising in the legal profession.[99] A study by the staff of the FTC concluded that fees for a number of routine legal services were higher in cities that imposed time, place, and manner restrictions on advertising.[100] The price of legal services for an

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[96] In 1983, sales of ophthalmic goods and services were over eight billion dollars. The share of optometrists in the market was approximately 44.2 percent. Staff Report by the FTC's Bureau of Consumer Protection, "Ophthalmic Practice Rules: State Restrictions on Commercial Practice. 'Eyeglasses II'" (1986), p. 9 and p. 21.

[97] Staff Report by the FTC's Bureau of Consumer Protection, "Ophthalmic Practice Rules: State Restrictions on Commercial Practice. 'Eyeglasses II'" (1986), p. 105.

[98] This estimate is simply the total dollar value of optometric goods and services purchased multiplied by .18 multiplied by the percent of the U.S. population residing in restrictive states. This total cost figure may overestimate the cost to consumers since the restrictions may not always result in the absence of chains.

[99] See Calvani, Langenfeld, and Shuford (1988), Schroeter (1987), and Staff Report by the FTC's Bureau of Economics and Cleveland Regional Office, "Improving Consumer Access to Legal Services" (1984). In addition, staff of the FTC has commented on possible anticompetitive effects of advertising restrictions in the legal profession. See, for example, Comments to the Supreme Court of Kansas Regarding Rules of Conduct for Kansas Bar (1987) and Comments to the New Jersey Supreme Court's Committee on Attorney Advertising (1987).

[100] Staff Report by the FTC's Bureau of Economics and Cleveland Regional Office, "Improving Consumer Access to Legal Services" (1984).

uncontested divorce, for example, was $33 dollars more in cities with restrictive advertising regulations.[101] A more recent study[102] of price advertising for a number of routine legal services confirmed this relationship between price and advertising restrictions.

Although the effect of attorney advertising on the Quality of service was not empirically measured in the study by the staff of the FTC, Muris and McChesney did examine this relationship. The authors found no support for the claim that "firms relying on advertising to charge lower prices will necessarily produce lower-quality services." [103] In particular, they argue that advertising allowed legal clinics to obtain lower costs, without a corresponding reduction in quality.[104] Advertising restrictions in other professions have also been shown to increase price with no improvement of quality.[105]

Thus, advertising restrictions in general and commercial practice restrictions in optometry generated costs for consumers with little apparent benefit. The process of reversing these losses has already begun. Restrictions on advertising have been eliminated to a great degree following the Supreme Court's decision in Bates v. State Bar of Arizona [106] In

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[101] Staff Report by the FTC's Bureau of Economics and Cleveland Regional Office, "Improving Consumer Access to Legal Services" (1984), p. 113-117.

[102] Schroeter (1987).

[103] McChesney and Muris (1979), p. 1506.

[104] Quality was measured by size of support payment in cases involving divorce and child support.

[105] Bond (1980) and Cady (1976).

[106] 433 U.S. 350 (1977). The Bates decision granted First Amendment protection to lawyers for nondeceptive professional advertising.

addition, the FTC recently enacted a Rule[107] that will preempt certain state imposed optometric commercial practice restrictions.[108]

Even if the quality of licensed professionals increases, however, business practice restrictions may result in both higher prices and reductions in - overall service quality received by consumers if individuals choose to "do With out" a professional's services. Regulations that restricted advertising in the legal profession, for example, may have caused some consumers to refrain from writing a will or obtaining a divorce.

Consumers may also "do without" certain health care services because of higher prices. For example, a study of restrictions that limit the practice of retail dentistry,[109] conducted for the Department of Health and Human Services (1982), found that retail dentists attract customers by offering their services at lower prices.[110] The General Accounting Office (GAO) estimates that "half of the U.S. population had not visited a dentist in a year, over one-third had not visited a dentist in two years or longer, and approximately

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[107] Ophthalmic Practice Rules 16 CFR Part 456. The Rule was scheduled to take effect September 1, 1989, but the D.C. Circuit Court decided on August 28, 1990 to grant petitions challenging the rule and vacate the rule. On October 12, 1990 the Commission petitioned the court for a rehearing by the panel and a rehearing in bank.

[108] Business practice restrictions affected by the Rule include, but are not limited to, restrictions on the number of branch offices an optometrist may own or operate, and restrictions on optometrists' offices in shopping malls.

[109] "Retail" dentistry refers to private group practices, practices in shopping malls and department stores, franchise dental practices, corporate chains, etc..

[110] AARP Study (1986), p. 23. While these authors did not examine quality of care as in the optometry study by the staff of the FTC's Bureau of Economics, there is no evidence which suggests that the quality of care provided by retail dentists is less than the quality of care provided by traditional dentists.

20 million Americans had never visited a dentist." (GAO, 1980, pp. 14-15.)[111] Restrictions that prevent discounts and expanded hours may discourage some individuals to seek care who would otherwise do so.

While it is natural to assume that enhanced quality makes consumers better off, this is not necessarily the case. Even when consumers don't "do without" or "do it themselves", enhanced quality is not necessarily desirable. Some consumers may prefer a low price, low quality combination more than a high price, high quality combination. The higher quality of licensed professionals may not be worth the extra cost to certain individuals. The inability of these consumers to choose a low price, low quality bundle makes them worse off.[112]

C. The Impact of Self Regulation

Professionals may be in the best position to determine what entry requirements are necessary to insure high quality and identify poor quality professionals within their ranks.[113] They may be the only group that can adequately evaluate the skills and competence of professionals who provide

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[111] Liang and Ogur (1987), p. 1.

[112] Feldman and Begun examined the welfare cost of quality changes arising from licensing business practice restrictions in optometry. In particular, these authors considered the effect of bans on price advertising, restrictions on commercial employment of optometrists, and continuing education requirements. The authors estimated consumers' willingness to pay for quality and found that the licensing business practice restrictions resulted in a net welfare cost equal to over eight million dollars in 1976. This loss occurred because "[t]he extra quality engendered by regulations is not valued by consumers at its marginal cost." Feldman and Begun (1985), p. 30.

[113] Wolfson, Trebilcock, and Tuohy (1980), p. 211.

complex services. A fellow lawyer, for example, may be the best person to determine if another lawyer is incompetent. A layman may be unable to determine if a plaintiff's unsuccessful litigation is the result of an intrinsic lack of merit or the lawyer's incompetence. Similarly, a layman may be unable to determine if a patient's death is due to a physician's actions or other factors. Members of a profession have the knowledge that is necessary to assure high quality. Whether the professions have an incentive to act in the public's best interest, however, is unclear.[114] As one group of commentators remarked, "[i]f the regulatory process is administered by the profession being regulated, there is a danger that its priorities will be distorted by professional self-interest."[115]

The costs of licensing may increase when the regulatory board is controlled by the profession. Theoretical findings indicate that professionals do have an incentive to limit entry by setting entry requirements that are too high.[116] Moreover, high entry requirements which are purportedly enacted to protect consumers are inconsistent with the process of grandfathering which professionals routinely demand.[117] Grandfather clauses specify that individuals who practice a profession prior to enactment of regulation, regardless of their education, etc., are granted all the rights and privileges that accrue to individuals who enter the profession after enactment of the legislation.

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[114] See Section III. B. 2. for a discussion of professionals' self-interest in seeking licensure.

[115] Wolfson, Trebilcock, and Tuohy (1980), p. 203.

[116] See Metzger (1987), Shaked and Sutton (1981), and Leland (1979).

[117] Rottenberg (1980), pp. 4-5.

The self regulated profession may also have an incentive to enact anticompetitive business practice restrictions or rules governing the conduct of members. For example, while continuing education requirements may be aimed at maintaining quality, many restrictions on advertising and location of business are more difficult to justify. By limiting consumers' access to information or services, these rules appear to impose costs on consumers while providing minimal quality benefits. In addition, by making it more difficult for consumers to obtain information on professionals' quality, restrictions on advertising further exacerbate the asymmetric information problem and make a potential market failure more likely. Public membership on regulatory boards may be effective in reducing the number of anticompetitive restrictions. One recent study on the effect of public members on licensing boards found that public members were "effective in reducing the number of nonsense requirements that limit entry into the four health occupations studied." [118]

The discipline process is often controlled by members of the profession,[119] which may lead to distorted incentives for enforcement. Violations of anticompetitive business practice rules could increase competition and lower incomes for members of the profession. Since professionals could be economically worse off when a member of their profession violates anticompetitive rules, professionals on disciplinary boards

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[118] Graddy and Nichol (1989), p. 623. Morality, age, and residency/ citizenship requirements were examined. These requirements were termed "nonsense requirements" because they do not appear to be related to the quality of service provided. The health care professions examined in the study were physicians, chiropractors, registered nurses, and licensed practical nurses.

[119] Young (1987), p. 41 and Rottenberg (1980), p. 4.

may have an incentive to prosecute individuals who violate these rules. These disciplinary boards could vigorously enforce anticompetitive business practice rules, but not enforce rules designed to maintain quality within the profession. As one group of scholars suggest, "Competitive behavior such as advertising, for example, may be heavily penalized, while complaints about excessive delays or fees may be downplayed."[120] The American Bar Association's discipline of attorneys for advertising and establishment of low cost legal clinics may have been used this way.[121]

A review[122] of the California Board of Optometry's enforcement efforts conducted by that state's Attorney General supported the claim that lax quality enforcement and vigorous anticompetitive rule enforcement exist. The report based on that review found that in 1983-84 the Board of Optometry suspended over 20 quality-related cases to pursue a case against a large optometric corporation for violations of practice restrictions such as advertising. Some of the suspended cases involved serious health and safety issues. These actions led one consumer group to comment that "[s]ince business practice restrictions are questionable forms of consumer protection, the use of limited licensing board time and enforcement budget on a case such as this, instead of pursuing complaints charging real injury to

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[120] Wolfson, Trebilcock, and Tuohy (1980), p. 203.

[121] For example, in California during the 1970's, the legal clinic of Jacoby and Meyers was vigorously opposed by the members of the American Bar Association (ABA). In March of 1973, the two founding attorneys were charged with violating the ABA Code of Ethics by behaving dishonestly, corruptly and with "moral turpitude." The case was finally resolved in the United States Supreme Court, which ruled against the ABA and exonerated the two attorneys. See 433 U.S. 350 (1977).

[122] "Review of the State Board of Optometry's Enforcement Program", Report by the Auditor General of California, June, 1985.

consumers' health and safety, is an unsatisfactory use of governmental power."[123] In addition, to the extent that the disciplinary process is ineffective in weeding out incompetent professionals, licensing may provide consumers with an inaccurate signal of quality and a false sense of security.[124]

D. Weighing the Costs and Benefits

The analysis above illustrates that mandatory entry requirements and business practice restrictions of licensing often increases prices, while providing little evidence of any quality benefits.[125] As noted, the estimated cost to consumers (in terms of higher prices) of certain business practice restrictions was estimated at approximately seven hundred million dollars in the dental profession in 1982[126] and five hundred million dollars in

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[123] AARP Study (1986), p. 17.

[124] This false sense of security may have been present among Ohio patients who were treated by physicians awaiting felony convictions. The doctors were allowed to continue practicing for months. Young (1987), p. 45. Patients may have also been misled when a Maryland gynecologist, who was convicted of raping his patient during an examination, did not lose his license. "Doctors Rarely Lose Licenses", Washington Post, Jan. 10, 1988, p. 1.

[125] A committee appointed by the Institute of Medicine recently examined the regulation of health care professionals and reached a similar conclusion. "It appears that widespread use of licensure carries with it higher costs to consumers, reduced access to health care services, and reduced flexibility for managers … Although these control mechanisms are designed and carried out in the stated interest of protecting the health and welfare of the public, their effectiveness in this regard has been mixed at best." Institute of Medicine (1989), p. 253.

[126] Liang and Ogur (1987).

optometry in 1983.[127] If such results are indicative of the effects of licensure in the sixty occupations licensed by most states, the cost to consumers would be substantial.

Consumers do not necessarily benefit, however, even if quality of the professional-rendered service increases. Higher prices may cause consumers to "do it themselves" or "do without." A loss may also arise if the cost of producing extra quality is greater than the benefits that consumers derive. Feldman and Begun found that business practice restrictions in optometry that increased quality resulted in a net welfare loss of over eight million dollars in 1976.[128] In addition, the systems that involve members of the profession in licensing may impose additional costs on consumers.

Given the ambiguous quality benefits and documented costs of licensing, policy makers should be cautious when professionals demand it. We cannot, however, conclude that the costs of licensing always exceed the benefits to consumers. Although selected business practice restrictions in dentistry and optometry discussed above were found to lack quality-enhancing benefits, other licensing restrictions, or even the same restrictions in other professions might increase quality and potentially benefit consumers. Thus, in considering the mandatory entry requirements of any licensing proposal or any specific licensing business practice restriction, it is important to weigh carefully the likely costs against the prospective benefits on a case by case basis.

Restrictions that tend to increase quality should be examined to determine whether the expected benefits of increased quality outweigh any

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[127] See pages 32-33 of this report.

[128] Feldman and Begun (1985), p. 30.

anticompetitive costs. The characteristics of the particular professional market should be examined to determine the extent to which the degradation of quality due to potential market failure is likely to be a problem. If market and nonmarket responses to market failure (e.g., reputation) appear to be fairly strong, licensing may not be warranted. In addition, if the costs associated with an inaccurate assessment of quality are low, then any quality-enhancing benefits of licensing are more likely to be outweighed by the costs that these restrictions will impose on consumers. In the case of interior decorators, for example, the costs of an inaccurate assessment of quality may be low, while reputation effects are likely to be high. Licensing of this profession, therefore, would appear unnecessary.

If, in contrast, there are significant costs of an inaccurate assessment of quality, and if market and nonmarket responses to potential quality degradation are lacking, then licensing is more likely to benefit consumers. For example, persons needing emergency health care may benefit from licensing requirements. In this situation, consumers may be unable to evaluate the quality of service, and the expected costs associated with low quality service are high. In addition, the person requiring emergency medical care may not be able to make informed choices, so reputation may not be effective in preventing quality degradation due to market failure. Finally, although the threat of litigation may deter quality degradation, the consumer must be able to determine if the doctor was negligent or incompetent. This may be difficult due to the numerous factors that affect one's health and recovery.

Even when the costs of an inaccurate assessment are high and market and nonmarket responses are ineffective, the costs of licensing could

outweigh any quality benefits. It is critical for policy makers to weigh the potentially high costs that can result from input and practice restrictions, against the potential benefits of regulation (i.e., see the studies discussed in the last section). The optimal policy response may be to do nothing. Finally, even if licensing is, on net, beneficial, this does not imply that licensing is the optimal regulatory framework. Policy makers should consider other, less costly forms of regulation before resorting to occupational licensure.

V. Alternatives to Licensing

If it is determined that some action is necessary[129] to ensure services meet a certain quality level,[130] there may be alternatives to licensing which achieve quality enhancing benefits at a lower cost. In this section we discuss several such alternatives and examine their strengths and weaknesses relative to licensing.

A. Certification

One of the most common alternatives to licensing is certification. Under certification, anyone is allowed to practice a particular occupation, but formal certificates of competency are provided to those who desire them

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[129] Action may be desirable if, for example, the information asymmetry is severe and market and nonmarket responses to increase quality are weak.

[130] A careful cost-benefit analysis is necessary to determine the optimal minimum quality level. A quality level that is set too high could harm consumers. See discussion on pages 28-29.

and can meet the necessary standards. These standards are similar to those established under a licensing arrangement. Under a licensing arrangement, however, only those individuals who meet the requirements are allowed to practice. Certification does not preclude practice by noncertified professionals. As of 1980, individuals in 65 occupations were certified by one or more of the fifty states. Professions which are certified by some states include librarians, ambulance attendants, sanitarians, and social workers.

Certification has a number of advantages over licensing.[131] One of the most important benefits of certification, as opposed to licensing, is that it would allow consumers greater freedom of choice. An individual could choose either a lower priced, noncertified professional or a higher priced, certified one.[132] Friedman states that "[i]f the argument is that we are too ignorant to judge good practitioners, all that is needed is to make the

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[131] Although economists, in general, agree that certification is preferable to licensing, one recent study by Shapiro (1986) found that this result does not hold in certain circumstances. Shapiro's result stems from an assumption that education levels are observable to consumers under a system of certification, but not observable under licensing. Certification, thus serves as a signal to consumers of the professionals' quality. While certification can result in the best possible outcome for consumers, in certain circumstances some professionals may have an incentive to obtain more education than is socially optimal. This could occur when quality-enhancing benefits are less than the cost of the education. This overinvestment in education represents a cost that, if substantial, could cause certification to be inferior to licensing. It is not clear, however, that certification is necessary to signal the education and quality level of the professional or that licensing would not also serve as a signal. Advertisement of a professional's education could presumably achieve similar results, depending on the criteria for certification. Thus, it is possible that certification is inferior to licensing, but this is unlikely.

[132] For example, an individual who wants help with her tax returns can choose to use the services of either a certified public accountant or a noncertified accountant.

relevant information available. If, in full knowledge, we still want to go to someone who is not certified, that is our business."[133]

In addition, the quality of service that consumers actually receive may increase if we allow certification in lieu of licensure. Instead of foregoing - legal services, such as the preparation of a will, for example, a consumer might choose to visit a low cost legal clinic that uses noncertified legal assistants. Another benefit of certification is that freedom of entry into the profession may spur competition. Innovative forms of delivery may be more likely to emerge under this less restrictive arrangement.

A system of certification, however, is not necessarily a desirable alternative to licensing. As in licensing, mandatory entry requirements for a certificate may not increase service quality if they focus on inputs, such as education. In addition, certification may not lessen quality problems associated with externalities.[134] A consumer who chooses a noncertified doctor, for example, may not take into account the possible effect of his quality decision on others, similar to our earlier example of treating

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[133] Friedman (1962), p. 149. Some individuals may argue that certification is undesirable when the health and safety costs of an inaccurate assessment of quality are high. This regulatory framework provides no information on the quality of noncertified professionals. A consumer may not know if the service of an uncertified professional is acceptable or extremely poor. If he chooses a noncertified professional who is incompetent, a consumer could incur significant costs. The argument against certification in this case, however, neglects the fact that the individual can choose either a certified professional with a lower risk of poor quality or a noncertified professional with a higher risk of poor quality. Unless the consumer is unaware of the increased risk associated with noncertified professionals, the individual that chooses the lower priced, higher risk, noncertified professional must prefer this option. Such an informed consumer would be worse off under a regulatory framework, such as licensing, that did not allow choice.

[134] Wolfson (1980), p. 205.

contagious diseases. Thus, certification may not be a preferred response to problems caused by externalities.

There may be, however, means of addressing the externality problem when the professional performs many services, not all of which are characterized by externalities. An accountant, for example, performs many services, only some of which are characterized by externalities. Most states require audits to be performed by certified public accountants. The certified public accountants' (CPA) certificate is a license required by those who perform audits. All accountants, whether or not they perform audit services, however, can become certified public accountants if they meet the requirements. Tax services and management advisory services, two accounting services in which externalities do not appear to be present, do not require the use of CPAs. Consumers could, however, hire CPAs to perform these services if they desire. Certification, therefore, may allow more flexibility than licensing that would require individuals who perform any accounting services to be licensed. States might require individuals to use certified professionals in situations where externalities are likely to be present and allow individuals to choose between certified and noncertified professionals when externalities are not present.

B. Monitoring the Quality of Outputs

To avoid the ambiguous quality effects that stem from mandatory entry requirements, policy makers may choose to implement a system of professional service (output) monitoring. Such a system would set standards of competence, monitor to insure compliance with standards, and penalize

professionals who fail to comply. Output monitoring can be more effective than licensing or certification in lessening any potential market failure where there is joint provision of diagnosis and treatment. Certification and licensing, while potentially increasing the quality of a professional's services, will not necessarily affect the incentives for overprescription of treatment or parts fraud. A system of output monitoring, which penalizes individuals who overprescribe treatment or engage in parts fraud, may lessen professionals' incentives to engage in this undesirable activity. Output monitoring may also be used in conjunction with licensing, certification, or registration.[135]

California's Bureau of Repair Services, for example, requires individuals who operate television repair facilities to register with the state and investigates complaints from consumers concerning repairs.[136] The Bureau has two laboratories and seven experienced repairmen. When a fraud complaint is made by a consumer, a repairman creates a malfunction in one of the state's televisions and brings it to the repair facility under investigation. If fraud or gross negligence is uncovered, the matter is forwarded to the Attorney General for disciplinary action. In the event that disciplinary action is taken, a press release is forwarded to the local newspapers. The cost of this program is approximately one million dollars a year. In 1988 approximately 3,600 complaints were received, approximately 750 inspections were conducted, 5 registrations were revoked, two registrations were suspended, and 24 criminal prosecutions were made.

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[135] Registration restricts the practice of a trade or profession to those individuals who have filed their names and other required information with the state. Thirty states registered wrestlers, for example, as of 1980.

[136] California also requires auto repairmen to register with the state and uses undercover cars to monitor compliance. Webbink (1977), p. 4.

The benefits of the California program have been discussed in a study of the television repair industry by the staff of the FTC's Bureau of Economics.[137] This study found that output monitoring was more effective than licensing or laissez faire for decreasing parts fraud. The incidence of parts fraud in San Francisco was 20 percent, compared to a 50 percent incidence of parts fraud in other areas examined.[138]

The effectiveness of output monitoring, however, is dependent on the degree to which regulators can and do monitor outputs, and apply penalties for noncompliance. This system could be costly to administer, compared to certification and licensing. A team of professionals must be employed by the state to monitor other professionals' performance. If the system relies on consumers to bring allegations of misconduct, only those instances of abuse which consumers can discover will be reported. In addition, it may be impractical to monitor professionals in some cases. For example, it may be difficult for regulators to monitor the performance of emergency medical care specialists. To assess the quality of care the regulator could directly observe the services provided by the specialist. If the specialist knows he is being observed, however, he may alter his behavior and provide better

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[137] Phelan (1974). Individuals who perform television repairs in California are required to register with the state. Allegations of fraudulent repairs are investigated by a staff of trained professionals hired by the state. The California system is thus a combination of registration and output monitoring. In the study, a malfunction was created in a television and brought to a repairman for servicing in order to monitor the television repairmen's performance. Since the individuals conducting the study knew what was wrong with the television, they could determine if the repairman's diagnosis and treatment were correct.

[138] The other areas examined were Washington, D.C. and New Orleans. New Orleans licensed television repairmen, while Washington, D.C. did not regulate repairmen.

quality services than he would otherwise. Thus, output monitoring may not be effective in this situation.

C. Other Informational Alternatives

In the preceding sections we discussed two alternatives to licensing, but a number of other, less restrictive, policy options are also available. In this section we will discuss three such options: registration, disclosure, and the provision of information on professionals' quality by the government or outside parties. These policy options do not exhaust all possibilities.[139]

1. Registration

A registration system, unlike licensing and certification, does not require that professionals fulfill certain requirements (e.g., education or experience) in order to practice. Individuals desiring to enter merely file their name and other required information with the relevant state authorities.140

While registration alone may not insure high quality, the threat of registration revocation by state authorities may be enough to provide

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[139] One possibility, for example, is private certification systems. Both accountants and real estate appraisers currently have private certification systems. As discussed is the previous section, certification offers many advantages over licensing. In addition, since the private sector may be more efficient than public regulatory boards, private certification systems may be an attractive alternative to licensing. This does not imply, however, that private certification schemes are without cost. These certification boards, like licensing boards, may also enact restrictions that impose costs on consumers — especially when such boards possess market power.

[140] A minimal registration fee is also usually imposed to cover administrative expenses.

professionals with the incentive to provide high quality service. In essence, this would amount to a system of free entry and enforced exit. The state authorities could revoke a professionals' registration for a number of quality related reasons. Felony convictions or a maximum number of legitimate complaints by consumers to state authorities, for example, could be grounds for revocation. The state may also wish to use registration in conjunction with monitoring professionals' quality. Unannounced spot checks of professionals' quality by state authorities, in addition to registration, may be sufficient to guarantee high quality in a large number of cases. This system is appealing because it would provide consumers with quality benefits without imposing the costs associated with licensing and certification. Although administrative and monitoring costs would still arise under this system, they may be lower than the costs of licensing or certification. The main deficiency of registration is that any professional could get away with at least one violation before being barred. Thus, this policy option may be undesirable when a single violation imposes significant harm, and the reduction in costs associated with moving to registration from licensing is small.

2. Mandatory Disclosure

Requiring disclosure of relevant information is another means of aiding consumers to determine professionals' quality. Disclosure of a day care provider 's criminal record, for example, could provide parents with useful information. Although compliance costs, administrative costs, and enforcement costs are incurred under a policy of mandatory disclosure, these

costs may be less than those that arise under licensing. If consumers are able to ascertain professionals' quality based on the information disclosed, the costs of mandatory disclosure are low, and consumers' tastes are varied, then a system of certification or licensure and its associated costs may be greater than the costs of disclosure. If, in contrast, the service performed is technically complex and consumers cannot determine professionals' quality from the disclosed information, then mandatory disclosure is less likely to benefit consumers.

3. Provision of Quality Information by Third Parties

Government bodies, groups, or associations other than those representing a profession in question may be able to provide consumers with unbiased information on the quality of professionals' services. AAA's Approved Auto Repair Services Program, mentioned earlier, is one example of this alternative in action. Independent diagnostic centers can also lessen the overprescription of treatment problem. The Auto Club of Missouri and the California State Automobile Association, for example, operated such facilities.[141] The key advantage of this policy option is that the information may be provided by less potentially biased parties to consumers who can evaluate its merits on their own. If consumers' tastes are varied, the costs of an inaccurate assessment of quality are low, and the information is useful to consumers, then this may be a viable policy option.

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[141] Webbink (1977), p. 6.

4. Summary

If it is determined that the quality of services needs to be raised, licensing is only one of several policy alternatives. While certification is the most common alternative, other options do exist and have been utilized. Policy makers should be aware of these other, less restrictive alternatives, and consider their likely benefits and costs when considering licensing of a profession. In addition, policy makers may wish to combine two or more of these policy options. For example, a system of registration and monitoring the quality of service may be optimal in some cases. The combination of two or more less restrictive alternatives to licensing may adequately safeguard consumers when the cost of an inaccurate assessment of quality are low. Any policy options, however, should be evaluated to determine whether they are, on net, beneficial. The likelihood and magnitude of increased quality should be weighed against the costs the particular policy imposes on consumers. In addition to the policy's effect on price and availability of service, the costs of implementation and administration should be considered.

VI. Current Status of Occupational Regulation

Regulation of the professions remains an active issue at both the state, and more recently, the federal level. The Federal Trade Commission staff continues to urge policy makers to consider the costs and the benefits that licensing or licensing restrictions may impose on consumers in any particular instance. In 1987, for example, the staff of the FTC issued a comment

which pointed out that there are likely to be few benefits and perhaps substantial costs imposed on consumers as a result of licensing interior designers.[142] Since 1984, the FTC staff has issued over 15 comments regarding the costs associated with lawyer advertising restrictions, solicitation restrictions, and various other restrictions embodied in lawyers' disciplinary rules and rules of conduct.[143]

According to Berry and Brinegar, of the National Clearinghouse on Licensure, Enforcement and Regulation,

> [s]tate officials concerned with occupational and professional licensing today face at least four major issues: 1) setting appropriate criteria for determining which of the growing number of groups requesting licensure should receive it; 2) evaluating the organization, structure, composition and performance of licensure boards; 3) assessing the continuing competence of licensed practitioners; and 4) creating mechanisms for exchanging information.[144]

Efforts to determine which of the occupations demanding regulation should be licensed have led some states to enact so-called "sunrise" laws. Fourteen states currently have sunrise laws. These laws require legislators to consider the likely benefits and costs of proposed occupational regulation. For example, to determine whether regulation of real estate appraisers would benefit the public, a Virginia study considered the following factors:

> 1) whether the unregulated practice of the occupation will harm or endanger the health, safety and welfare of the public;

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[142] Comments of the Federal Trade Commission's Bureaus of Competition, Consumer Protection and Economics re the Licensing of Interior Designers, Presented to the Hon. Garrey Carruthers, Governor of New Mexico (March 18, 1987).

[143] See, for example, Comments of the Federal Trade Commission staff of the Bureaus of Competition, Consumer Protection, and Economics re Rules of Conduct for the Kansas Bar, Presented to the Supreme Court of Kansas, (August 17, 1987).

[144] Berry (1988).

2) whether the practice of the occupation requires a high degree of skill, knowledge, and training and the public therefore requires assurance of initial and continuing competence;

3) whether the functions and responsibilities of the practitioner require independent judgment and the members of the occupation practice autonomously;

4) whether there are alternatives to regulation that will protect the public; and

5) whether other states have found regulation of appraisers to be effective.[145]

In considering the role of allied health professionals, the Institute of Medicine has recently advocated less restrictive regulation[146] of these professions.[147] Less restrictive regulatory options include multiple ways of obtaining a license, or certification in lieu of licensure. These measures could lower the cost of regulation, while preserving its benefits. If the states adopt these suggestions, consumers are likely to be better off.

Attempts to insure the competence of existing members of the profession

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[145] Report of the Virginia Board of Commerce on "The Study of the Desirability of Regulating the Profession of Real Estate Appraisers" (1988).

[146] State Health Notes (1989), p. 11.

[147] Clinical laboratory technologists/technicians, dental hygienists, occupational therapists, and dieticians, are among the allied health professionals examined. These professions are currently regulated by each state. As of 1986, dieticians and occupational therapists, for example, were licensed in 6 and 29 states respectively. (Berry (1986), pp. 382-383.)

also appear to be gaining momentum at the state level.148 We will review two such proposals.

Maryland, for example, recently passed legislation to change the system whereby medical professionals are disciplined.[149] Lax enforcement of quality standards due to self-discipline had been mentioned as a problem which plagued the past system.[150] The state medical society (the Medical Chirurgical Faculty of Maryland) exerted a significant amount of control over the disciplinary process. Allegations of disciplinary violations were brought to the Commission on Medical Discipline (9 of the 11 members of which are physicians) and referred for investigation to a voluntary panel of physicians from the state medical society. The new law has resulted in: (1) more investigators; (2) more support from the Attorney General's office and; (3) creation of a Board of Physician Quality Assurance to replace the Commission on Medical Discipline and Board of Medical Examiners. The majority of the members on this Board are still physicians appointed by the Governor. Preliminary investigations are conducted by the Central

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[148] In addition to the states' regulatory actions, the National Disciplinary Information System (NDIS) was created in 1984 in an effort to exchange disciplinary information among the states. NDIS was created by the National Clearinghouse on Licensure, Enforcement and Regulation (CLEAR). CLEAR is a professional association of state licensing officials. Prior to the establishment of NDIS, licensing authorities in a state were less likely to know if a professional was judged to be incompetent in another state. The NDIS data covers 40 professions and lists final disciplinary actions taken by each reporting agency. Cases that are suspended or dismissed are not included in the statistics. Given the secretive nature of most licensing boards' disciplinary activities, the fact that some data on disciplinary boards' activities is now being compiled is encouraging.

[149] Maryland Senate Bill 508 and House Bill 855, entitled "Medical Discipline: State Board of Medical Quality Assurance". The bill passed both houses and was signed by the Governor on May 2, 1988.

[150] "Panel Regulating Maryland Doctors Seldom Acts to Revoke Licenses," The Washington Post, January 10, 1988, p. 1.

Investigative Unit of the Department of Health and Mental Hygiene.[151] Cases involving questions of medical practice are referred to the state medical society for peer review. To the extent that this bill represents a move away from the potential for mixed incentives created by self-discipline,[152] it may benefit consumers.

A state medical panel formed by Governor Cuomo of New York recently issued a report153 that recommended an alternative regulatory scheme in the medical profession to insure continuing competence of physicians. The proposed change would consist of reviewing physicians for competence at regular intervals. If a physician is judged to have performed inadequately, he would be required to take action to remedy the situation or, in extreme cases, lose his license to practice. The Advisory Committee on Physician Recredentialing is currently examining different ways to implement the proposal. As of October 1990, no action had yet been taken on this proposal. It is possible that periodic review of physicians' competence would obtain greater benefits than either certification or licensing alone.

While most of the impetus for occupational regulation occurs at the state level, the federal government has also experienced occasional pressure to license occupations. For example, in response to claims that inflated

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[151] This unit consists primarily of investigators and support staff. These individuals have more expertise than doctors in conducting inquiries and bringing legal cases.

[152] Since the Board is still dominated by physicians, it is not clear if this represents a significant movement away from self-discipline. To the extent that the Central Investigative Unit of the Department of Health and Mental Hygiene is not subject to physicians' influence, however, the bill could lessen the professions' control over the disciplinary process.

[153] Report of the Advisory Committee on Physician Recredentialing, January 1988.

appraisals have led to bank failures in some parts of the country, the U.S. House of Representatives in the last Congressional session considered (but did not adopt) a bill to regulate appraisers.[154] The bill stated:

> Faulty and fraudulent real estate appraisals that overvalue property securing loans and investments have become a pervasive national problem whose effects are extremely harmful and costly to federally insured financial institutions; to Federal agencies and instrumentalities which guarantee repayment of mortgage loans or which provide liquidity to mortgage markets; to investors in mortgage backed securities; and to mortgage lenders, insurers, and others who participate in real estate-related financial transactions. [155]

The federal proposal provided for the formation of the Federal Interagency Appraisal Council. The Council would have

> (1) issued rules describing categories of real estate-related financial transactions which constitute federally covered transactions under this Act;
>
> (2) prescribed uniform standards for the performance of real estate appraisals in connection with federally covered transactions;
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> (3) established requirements for the certification of persons who are qualified to perform appraisals in connection with such transactions, including a code of ethics;
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> (4) directly granted certification to and supervised the activities of persons qualified to perform appraisals in federally covered transactions in States which do not have an approved State appraiser certifying agency;
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> (5) monitored and overseen the activities of approved State appraiser certifying agencies; and
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> (6) transmitted an annual report to Congress.156

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[154] H.R. 3675, "The Real Estate Appraisal Reform Act of 1987".

[155] House Bill H.R. 3675, p. 3.

[156] House Bill H.R. 3675, pp. 6-7.

Although this bill was designed to insure accurate appraisals, incentives facing banks and appraisers to design inflated appraisals may have remained.[157] Thus, the benefits, in terms of more accurate appraisals, were likely to be low. The costs of increased education and experience requirements, along with administrative costs, could have outweighed the benefit of more accurate appraisals. This bill, which was intended to benefit consumers by increasing the provision of more accurate appraisals, could have made them worse off instead.

Other activity at the federal level includes authorization of a National Data Bank on actions taken against physicians and dentists through litigation, licensing, or clinical privilege sanction.[158] If this information is made available to the public, it may assist consumers make judgments on a professional's quality, lessen any potential quality deterioration problems, and thus make some licensing requirements unnecessary.

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[157] A recent Congressional Report states "[l] ending institutions' officers, directors and managers are . . . more interested in up-front fees and other tangible benefits accruing from a loan transaction, than they are with being assured that their institution's risk exposure is minimized by an accurate assessment of the actual market value of the loan's underlying collateral." House Report 99-891 Impact of Appraisal Problems on Real Estate Lending, Mortgage Insurance, and Investment in the Secondary Market. The larger the loan, the more money the bank obtains immediately in up-front fees. This short-sightedness on the part of lending institutions may lead, in turn, to pressure on appraisers to overstate the value of property. A Virginia study of real estate appraisers revealed that "60.2% [of the real estate appraisers surveyed,] reported receiving pressure from or being requested by a client to provide a biased appraisal." Report of the Virginia Board of Commerce on The Study of the Desirability of Regulating the Profession of Real Estate Appraisers. House Document No.5, 1988, p. 5.

[158] "Public Health Service Proposes Rules for National Data Bank", Professional Regulation News, April, 1988, p. 2. The National Data Bank is required under Part B of the Health Care Quality Improvements Act of 1986, Title IV of Pub. L. 99-660.

The preceding discussion of regulatory proposals indicates that, in general, policy makers seem to be becoming more aware of the costs of regulation and self-regulation, in particular. In light of our earlier analysis, sunrise laws and attempts to insure continuing competence of professionals appear likely to benefit consumers. Given that most studies find existing licensing regulations impose substantial costs on consumers (See section IV), policy makers may wish to consider the likely benefits and costs of these requests before requiring licensing of professionals. They may also want to consider the alternatives, such as registration or voluntary certification.

VII. Conclusions

Occupational licensing or some other policy alternative, such as voluntary certification, may be desirable if a "market failure" occurs in the provision of services. Potential market failures may arise in the provision of professionals' services due to (1) consumers' inability to determine professionals' quality, (2) externalities which may occur when consumers' purchase decisions and the sellers' decisions do not take into account the effects on third parties not involved in a transaction, and (3) the dual role of the professional as diagnostician and treatment specialist. There are also, however, a number of market and nonmarket responses that mitigate the problems caused by any potential market failure. Although the potential for quality degradation and overprescription of treatment may be present in a market, government intervention may not be beneficial, on net. Studies estimate that there are large costs associated with business practice

restrictions of licensing and that the quality of professionals' services may not be improved due to these restrictions or mandatory entry requirements.

In assessing whether regulation will benefit consumers and in determining the best regulatory framework — if regulation is needed — the characteristics of a particular market must be examined. Policy makers should consider the extent to which a potential market failure is likely to harm consumers. In particular, it is important to analyze: (1) the effectiveness of market and nonmarket responses to the problems created by market failure, and (2) the expected costs which will be incurred in the absence of regulation, and (3) the costs of any regulations, such as licensing, designed to cure the alleged market failure. If market and nonmarket responses, such as tort law and reputation, are strong, they may effectively mitigate any potential market failure problems and licensing would not be desirable. If the cost of an inaccurate assessment of quality is low, but a resultant increase in price due to regulation is high, then any potential quality enhancing benefits of licensing are more likely to be outweighed by the costs to consumers. In the dental profession, for example, one study estimated the cost to consumers of restricting the use of dental auxiliaries was over one billion dollars in 1970. In optometry, commercial practice restrictions cost consumers over one hundred million in 1983 in California alone. The national cost of optometric commercial practice restrictions could be as high as five hundred million dollars. The studies reviewed and evaluated by this report indicate that licensing (1) may not increase quality, (2) has imposed large costs on consumers, and (3) may be ineffective in lessening potential overprescription of treatment problems. Therefore the use of licensing should be limited to cases in which other, less restrictive,

alternatives are ineffective or more costly to administer. Other, potentially less costly alternatives include no government action, certification, monitoring the quality of service, registration, disclosure, and the provision of information by third parties.

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