



Regulatory Disequilibrium and Inefficiency: The Case of Interstate Trucking*

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Abstract. Economic regulation is characterized as (1) an effort by special interests to influence the allocation of property rights, in (2) a continuous path-dependent spontaneous evolution (as apposed to a static equilibrium), driven by (3) market, political, and bureaucratic entrepreneurship in an ongoing discovery process. The implications of the model are illustrated by an examination of the evolution of regulation in interstate trucking. The model is also used to explain that the Chicago School's political-regulatory efficiency conclusions are incorrect, and that the inefficiencies arising from rent seeking are even greater than the Public Choice approach implies.

Key Words: rent seeking, spontaneous evolution, regulation, deregulation, property rights

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1. Introduction

Two prominent theoretical approaches to the political economy of regulation began at roughly the same time with the publication of two seminal papers. The Chicago-School's focus on regulation was stimulated by Stigler (1971) while the rent-seeking literature of the Public Choice School traces to Tullock (1967).¹ These two approaches actually have much in common (Tollison 1982). They both reject "public interest" or "market failure" explanations for regulation that dominated mainstream economics before their publication, emphasizing instead that regulation is the outcome of a political competition between relatively narrowly focused interest groups seeking wealth transfers or artificial rents. Both also rely on static equilibrium modeling. Nonetheless, they diverge in their conclusions regarding the efficiency of such transfer processes. While the rent-seeking literature tends to stress the inefficient "waste" of resources consumed in the political competition, a Chicago-School emphasis on the efficiency of the political/regulatory process (e.g., Posner 1974, Becker 1983, Wittman 1989, Stigler 1992) traces, at least in part, to Stigler (1971). One purpose of the following presentation is to demonstrate that the Chicago School's efficiency conclusions are incorrect, except perhaps in a very limited and generally uninteresting sense. A second purpose is to illustrate that the inefficiencies are even greater than the Public Choice

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approach implies. The conclusions regarding both of these contentions arise because neither school has given systematic consideration to insights from two other schools of thought: the Austrian School with its emphasis on the passage of time, limited knowledge, and entrepreneurship, and New Institutional Economics with its focus on the impact of insecure property rights. Therefore, in order to accomplish these two purposes, the presentation is divided into four sections in addition to this introduction. Section 2, briefly explores the reasons for the apparently different efficiency conclusions by the Chicago- and Public-Choice-School interest-group theories of regulation. Section 3 discusses four interrelated concepts in order to explain that the regulatory process is not going to be stable (equilibrating) or efficient: the knowledge problem, spontaneous order, and entrepreneurship in a discover process from Austrian economics, and the incompleteness of property rights from New-Institutional economics.² Section 4 illustrates the implications of this analysis with a discussion of interstate trucking regulation. Conclusions appear in Section 5.

2. Chicago-School Versus Public Choice in Regulation Theory

Both the Chicago- and the Public-Choice schools assume that regulation provides benefit for “special interests” who are able to influence the political process by imposing costs on individuals who have less political power. Monopoly pricing is not a reflection of market failure that calls for government regulation in order to move in the direction of Pareto optimality, for instance, but rather, it is a product of government actions to provide wealth (monopoly rents) to the politically powerful firms in an industry through actions such as the division of the potentially competitive market into exclusive marketing territories, creation of legal barriers to entry, and/or imposition of limits on price competition. Both approaches also rely on static equilibrium modeling. Yet, they appear to produce very different conclusions. For instance, the Chicago-School model implies “that the regulatory process can be expected to operate with reasonable efficiency to achieve its ends. The ends are the product of a struggle between interest groups, but . . . it would be contrary to the usual assumptions of economics to argue that wasteful or inappropriate means would be chosen to achieve those ends” (Posner 1974:217). In contrast, the public-choice/rent-seeking approach stresses that the resources expended to establish lobbying groups, invest in political campaigns, and so on, have opportunity costs (they could be used to produce new wealth rather than to transfer existing wealth), so they are “wasted”. The apparent difference in efficiency conclusions is clearly definitional, however, at least in part. The Public Choice emphasizes the fact that potentially productive resources are diverted into the competition for rents, and as a result, the economy cannot achieve Pareto optimality by reaching its production possibility frontier. In contrast, the Chicago School stresses the fact that transactions costs exist which prevent the ideal neoclassical general equilibrium. Political transfers cannot be prevented so the economy is constrained by more than just the availability of resources and production technologies. However, according to this approach the political process tends to minimize the transactions costs associated with political transfers, so given the transactions costs associated with political institutions, efficiency prevails in a second best sense. These two views are actually quite compatible, of course, at least up to this point. The regulatory process can be inefficient relative to the neoclassical paradigm’s ideal of Pareto optimality,

as the rent-seeking literature emphasizes, but efficient in the sense that rational individuals operating in the face of opportunity costs in both production and transactions tend to maximize their well-being (and therefore minimize costs) subject to the constraints they face, à la the Chicago School.

There is another, although related, difference between the Chicago and Public-Choice approaches to regulation that arises because legislators do not actually establish the details of, or enforce the regulations they establish. These tasks are delegated to commissions and bureaucracies. The Chicago-School model of regulation generally ignores these agencies, focusing only on legislators as the “suppliers” of regulation, while the public-choice school sees these actual “producers” of regulation as another source of inefficiency. There clearly is a potential principal-agent problem, of course, but some writers (e.g., Fiorina and Noll 1978, McCubbins, Noll, and Weingast 1987, Weingast and Moran 1983) see the constraints imposed by legislative oversight as being quite tight, so that bureaucrats are not able to depart very far from the wishes of their sponsors. If this is the case, then the Chicago-School’s perspective on the regulatory process is supported—the interests of the bureaucrats can be ignored, with focus on the interests of legislators and interest group members. Others see political control to be weak (e.g., Tullock 1965, Niskanen 1975, Breton and Wintrobe 1982, Benson 1995), however. If there were no constraints on legislators’ time and resources and they have sufficient knowledge, they would force politically efficient behavior, but constraints (as well as a severe knowledge problem as discussed below) do exist (Tullock 1965:72–73). In fact, much more time and effort apparently ends up being directed at dealing with interest groups than with bureaus (Johnson and Libecap 1994:139). Thus, control of a bureau should be “imperfect” in the sense that politically ideal outputs are not likely to be produced and production is not likely to occur at minimum costs (discretionary budgets exist). In this context, for instance, while Weingast and Moran (1983) examine Federal Trade Commission (FTC) behavior, find evidence of Commission responses to political demands of the Congressional oversight committee’s constituencies, and conclude that bureaucrats are effectively controlled by Congress, Johnson and Libecap (1994:158) point out that “Showing that Congress had sufficient power to control a ‘runaway’ agency does not deny the existence of independent bureaucratic behavior.” Indeed, Faith, Leavens, and Tollison (1982), who examine very similar issues to those explored by Weingast and Moran (1983), conclude that “we would not be so hasty in discarding [either] budget-maximizing [arguing against Weingast and Moran (1983)] or congressional influence hypotheses [arguing against Katzman (1980) who finds no evidence of congressional influence on FTC behavior] about regulatory bureau behavior” (1982:342). In general, the empirical literature suggests that an uncontrolled bureaucracy model does not explain bureau behavior, but neither does a model which assumes that the bureaus have no discretion and simply respond to legislative demands.³

Adding the Public-Choice perspective on bureaucratic enforcement to the regulatory model clearly adds opportunity costs, thus reinforcing the conclusions of the rent-seeking literature. After all, the resources consumed in bureaucratic regulation also have alternative uses, but because of the rent-seeking process, they are diverted to the production of transfers. Of course, the Chicago School can still argue that the result is efficient: even if monitoring costs prevent perfect control of the bureau, the political gains from allocating regulatory

power to bureaucrats must exceed the political costs arising from the allocative inefficiencies and excesses associated with bureaucratic production or the bureaucratized regulatory process would not survive. Thus, given the political reality of transactions costs, second-best efficiency apparently prevails! Consideration of insights from the Austrian and New Institutional Schools of economics tend to undermine these Chicago-School conclusions, however.

3. Regulatory Disequilibrium and Inefficiency

Mises (1949:692) explains that market-failure justifications for state actions and the “public interest” view of the state “ascribe to the *state* not only the best intentions but also omniscience”; he goes on to point out that neither assumption is valid, and that dropping either one undermines the conclusions that state intervention is desirable. Public-Choice and New-Institutional-economics scholars have tended to focus on the interest problem in their analysis of government failure, although some also obviously recognize the knowledge problem. In contrast, Austrian scholars have tended to focus on the knowledge problem in their challenges to regulation (e.g., Kirzner 1985:119–149, Ikeda 1997). In fact, Ikeda (1997:240) explicitly distinguishes between Public Choice and Austrian political economy by suggesting that the Austrian approach assumes benevolence on the part of government officials while the public choice approach assume narrow interests. Many Austrians, including Ikeda (1997:145–151) and Kirzner (1985:121) obviously also recognize the interest problem, of course, but, as Kirzner (1985:121) notes, “valid though these approaches to a critique of interventionism undoubtedly are, they do not exhaust the phenomena to be explained.” That is precisely the point made here, except that instead of assuming away the interest problem to focus exclusively on the knowledge problem, an attempt is made to consider both. While the following analysis does not provide a complete integration of Public-Choice/Austrian/New-Institutional-Economics approaches to regulation (and therefore, is not intended to review all the literature that might be relevant to the subject) it does emphasize that Public-Choice (and New-Institutional economics) underestimates the consequences of regulation by ignoring the knowledge problem.⁴ More specifically, the presentation explores implications for a Public-Choice perspective on regulation of adding four interrelated considerations, the knowledge problem, spontaneous order and entrepreneurship in a discovery process as stressed in the Austrian literature, and the incompleteness of property rights as stressed in the New Institutional approach. In particular, economic regulation or rent seeking is characterized as (1) an effort by special interests to influence the allocation of property rights, in (2) a continuous path-dependent spontaneous evolution (as apposed to a static equilibrium), driven by (3) entrepreneurship in an ongoing discovery process.

3.1. *Rent Seeking from a Property Rights Perspective*

The Chicago School assumes that the object of interest group demand is a transfer of wealth. This is somewhat misleading, however, if it is interpreted to imply that individuals become involved in interest group activities only if they can gain (or avoid losing) monetary or physical wealth. Clearly this is not the case. In fact, while “material” self-interest motives

can often be identified for groups seeking changes in laws and regulations, value is subjective so some self-interest motives can be unidentifiable. Indeed, many members of the relevant groups firmly believe that the changes they demand are in the “public interest.” Of course, the “public interest” is totally a normative concept—it is what each individual subjectively believes it to be. And an individual’s perception of the public interest is often colored by his own underlying self interests. Indeed, beliefs may well be endogenous as individuals rationalize their self interests (Ikeda 1997:110–117; Benson 2001a). Furthermore, because of pervasive ignorance, and inherent uncertainty, those beliefs and interests (preferences) are likely to be continually changing as time passes and people undergo the experiences of life (Vaughn 1994:80). Nevertheless, the use of terms like “wealth-transfer” and even “interest group” should not imply negative judgments about the members of all such groups. Of course, if “wealth” is more broadly defined to mean well-being or satisfaction (as Stigler and others who have written on the subject may suggest it should be), there is little cause for confusion, but then the model can lose considerable predictive power as testable hypotheses are not readily apparent.

The rent-seeking approach suffers in a similar way. Rents are returns to the use of unique assets (real resources such as fertile land, advantageous locations, personal skills, or artificially created assets such as licenses, franchises, or legally defined markets), but some interest groups do not appear to capture any “economic returns.” Again, if these rents are considered more broadly to include gains in subjective well-being or satisfaction then the concept might be applied to such groups. As an alternative, however, let us define the objects of interest group demand, and the functions of government law as (Benson 1984): (a) the assignment of property rights, and (b) enforcement of each property rights assignment. This is completely consistent with the objectives of members of groups like the Sierra Club and the American Civil Liberties Union who may not think that they obtain any personal gain (narrowly defined wealth or rents) from their political activities, even though they do gain, given their subjective values. Property rights “convey the right to benefit or harm oneself or others” (Demsetz 1967:348), however. They dictate the distribution of rents and of wealth, and changes in property rights reallocate, destroy, and create rents and therefore transfer wealth. Whenever an interest group is successful in altering the assignment of property rights, other individuals lose (indeed, this is why Ikeda (1997:105) is correct when he notes that intervention always produces winners and losers). Thus, political competition is likely even if some groups are not seeking monetary or physically measurable wealth or rents, because their successes impose costs on others, creating incentives for those who lost to try to regain their previous level of well-being (Benson 1984, Ikeda 1997:108). Governments govern by assigning and enforcing rights, and by more or less continuously modifying and changing them in the face of changing interest group demands (Benson 1984). A clear example of this is provided in the next section where trucking regulation is discussed.

This property-rights perspective is consistent with Tullock’s (1967) analysis, of course. Theft is an attempt to claim assets or resources that are not perfectly protected, for instance—that is, property rights are not completely secure. Thus, thieves use resources, particularly their time, in order to claim these assets, and potential victims use resources in an effort to deter or prevent theft. Tullock points out that precisely the same analysis applies to the political transfer process, but if property rights were perfectly delineated and perfectly

secure there could be no rent seeking. It is because rights are somewhat less than perfectly secure, that they are vulnerable to takings through the political process. Therefore, some individuals and groups expend resources in an effort to get property rights altered so the assets will be used as they want them to be, and others expend resources in an effort to defend their claims.

This property rights perspective has advantages over the “rent- (or wealth-) seeking” concept beyond clarifying the consequences of actions taken for the benefit of successful interest groups whose members see themselves as public-interested individuals. In particular, the multi-attribute character of most assets and the transactions costs associated with delineating and enforcing property rights mean that rights to an asset or resource are never likely to be perfectly delineated and secured. That is, using Barzel’s (1989) terms, “some valued properties will always remain in the public domain.” One source of entrepreneurial opportunity is the value that remains in the public domain due to incomplete property rights delineation, however. Thus, as a result of the entrepreneurial discovery process discussed below, individuals may discover potential values that were unknown, particularly if any claimed rights are expected to be secure. Individuals attempt to discover and capture such value, in part through institutional innovations that reduce transactions costs, but these costs do not fall to zero. Therefore, complete delineation of all property rights to assets are not likely to arise, just as profit opportunities are not likely to ever be completely discovered so a true “equilibrium” arises, as Ikeda (1997:62) stresses (but because of the knowledge problem rather than a combination of the knowledge problem and transactions costs).

The property rights prospective has another implication as well. The transactions costs of enforcing any property rights assignment, and especially an assignment arising through special-interest regulation, mean that enforcement will be imperfect. After all, new regulations intended to assign property rights to particular interested parties will tend to place additional value in the public domain, creating incentives for entrepreneurial individuals to take actions to capture that value. Thus, as Austrians such as Mises (1949:758–776 and elsewhere), Kirzner (1985:133–145) and Ikeda (1997:94–99 and elsewhere) stress, a regulation leads to spontaneous responses, many of which are not anticipated by members of the interest groups, the legislature, or the regulatory bureau.

3.2. *The Spontaneous Evolution of Regulation*

The Chicago and Public-Choice approaches to regulation focus on the “order” (equilibrium) that should emerge if conditions remain stable, but the focus here is on the inherently destabilizing evolutionary process that characterizes special-interest regulation. The evolution of regulation and regulatory institutions clearly involves deliberate “human design,” for instance, and significantly, designed rules can disrupt spontaneous orders, but the result is not likely to be a designed order, as Hayek (1973:51) explains:

It is impossible, not only to replace the spontaneous order by organization and at the same time to utilize as much of the dispersed knowledge of all its members as possible, but also to improve or correct this order by interfering in it by direct commands.... it can never be advantageous to supplement the rules governing a spontaneous order by

isolated and subsidiary commands concerning those activities where the actions are guided by the general rules of conduct ... the reason why such isolated commands requiring specific actions by members of the spontaneous order can never improve but must disrupt that order is that they will refer to a part of a system of interdependent actions determined by information and guided by purposes known only to the several acting persons but not to the directing authority. The spontaneous order arises from each element balancing all the various factors operating on it and by adjusting all its various actions to each other, a balance which will be destroyed if some of the actions are determined by another agency on the basis of different knowledge and in the service of different ends.

While balance created by a spontaneous order does tend to be destroyed by efforts to deliberately implement “isolated and subsidiary commands,” these deliberately designed rules are rarely able to completely dictate the targeted behavior because knowledge is incomplete for the rule maker (Hayek 1973, Kirzner 1985:145, Ikeda 1997:50–52), and because policing is imperfect (Benson 1999, 2001b). The knowledge problem suggests, among other things, that are too many uncontrolled margins and unanticipated responses for a rule designer to recognize and anticipate, in part because the changes create a new set of opportunities that have not previously been available. After all, as Kirzner (1985:135) stresses, “In the face of these controls, regulations, and interventions there remains, nonetheless, a genuine market ... Government controls constrain and constrict; they rearrange and repattern the structure of incentives; they redistribute incomes and wealth and sharply modify both the process of production and the composition of consumption. Yet within the limits that such controls impose, buying and selling continue, and the constant effort to capture pure entrepreneurial gain keeps the market in perpetual motion.” Regulations are likely to have a significant impact on the discovery process, however. Deliberate efforts to impose rules create incentives to find and exploit the uncontrolled margins in order to avoid the full consequences of the rules (Benson 2001b). Thus, the discovery process tends to be redirected along a new path. This means, as Kirzner (1985:141–144) explains, that discoveries which probably would have been made in the absence of the regulation are never made. Such stifled discoveries are an additional, and conceivably the most significant, costs of regulation, which the static equilibrium analysis of Public Choice and the Chicago-School cannot reveal. In addition, regulation creates a “wholly superfluous” discovery process as “entirely new and not necessarily desirable [either from the perspective of the interest groups involved or from an efficiency perspective] opportunities for entrepreneurial discovery” (Kirzner 1985:144).

Mises (1949:859) stresses that “As soon as something happens in the economy that any of the various bureaucratic institutions does not like or that arouses the anger of a pressure group, people clamor for new interventions, controls, and restrictions.” As entrepreneurs discover new opportunities, many of which involve ways to avoid or mitigate the intended transfer consequences of the regulations, the intended benefits of the regulation for interest groups fall, they pressure the rule makers to do something about it, and the likely response is new rules intended to block such maneuvers. Those subject to the new rules react again, however, leading to more “clamor”, new blocking efforts, and so on. Therefore, deliberately designed rules and institutions also evolve spontaneously as regulators and their subjects

attempt to discover ways to achieve their subjective and often conflicting ends. In other words, the evolution of intentionally created rules is path depend, as such rules are influenced by what has come before and they in turn influence the path of the spontaneous evolution that follows, but the result is not likely to be equilibrating. The perception that a deliberately designed market order (equilibrium) through regulation is an alternative to spontaneous order is incorrect (Ikeda 1997:74–75, 143–144, Benson 2001b).⁵

3.3. *Market Entrepreneurship in a Regulatory Environment*

Kirzner (1997:62) explains that entrepreneurial discovery of opportunities in a market environment gradually and systematically pushes back the boundaries of ignorance, thereby driving down costs (both production and transactions) and prices while increasing both the quantity and quality of output. Such opportunities can arise through discovery of a new product that will fulfill consumers desires more effectively, or of a production technique that lowers the costs of providing an existing product. They can also arise through discovery of an “error” (or a “difference in knowledge”) in a market that creates an opportunity for arbitrage, for entry into a profitable niche in an existing market, or entry into an untapped market for an existing product. And they can arise through discovery of an organizational innovation that lowers transactions costs. When a market is subject to regulation, the potential for entrepreneurial discover may actually be enhanced, although importantly, it is also redirected (Kirzner 1985:141–145). Regulations introduce errors into markets, so by finding ways to circumvent regulations or reduce their impact, entrepreneurs capture some of the rents that are suppose to go to members of powerful interest groups. Perhaps this can best be illustrated by an example.

Consider Mises’ (1949:762–766) and Cheung’s (1974) analyses of the consequences of price ceilings, focusing first on the following question: How are property rights allocated to a commodity that is sold at a money price below the market equilibrium?⁶ The standard neoclassical textbook prediction is that a permanent shortage arises with a price ceiling, but this ignores the potential for rational responses by individuals to the resulting situation. Essentially, the price ceiling puts the value between the price consumers are willing to pay and the legal price into the public domain (i.e., creates “gaps between costs and revenues,” as Kirzner (1985:132) explains) creating incentives for both buyers and sellers to attempt to capture that value. Therefore, buyers and/or the sellers can take additional steps to get or to provide another unit at a cost below added gain. For instance, consumers compete for the limited supply by queuing and searching (Mises 1949:763), but these activities are costly, so the full price consumers pay is much higher than the money price. Demand based on full price implies that the shortage shrinks, and given no other adjustments, ultimately disappears. Some consumers may be better off (e.g., those with low values of time) but others are worse off. Other margins of adjustment also often exist, however, so this “full price” equilibrium is not actually likely to arise as both entrepreneurial buyers and sellers will “take advantage of disequilibrium conditions” (Kirzner 1985:129).

Barzel’s (1989) discussion of an example, the price ceiling on gasoline during the early 1970s, suggests that kinds of reallocations of resources, a la Mises (1949:763), and superfluous discoveries, a la Kirzner (1985), that inevitably arise. In this case, sales were in

terms of tanks of gasoline, so consumers tended to queue up relatively frequently (not allow their tanks to get as close to empty as they would if there was a market clearing price), but the resulting high time costs created incentives for some consumers to add gas-tank capacity and others to pay people to wait in the queue for them. Entrepreneurial sellers had more margins to adjust on, however. Under the law, they were supposed to maintain pre-price control money prices, but regulations did not control numerous characteristics of the product. Producers were able to capture part of the value from the public domain by reducing quality (e.g., octane), unbundling products (e.g., removing additives to sell them separately, removing the “services” that had been bundled with gasoline by moving to self service, reducing the hours of operation and therefore the level of convenience that consumers had previously enjoyed), rebundling products in different ways (e.g., selling gasoline only to consumers who purchased an oil change or a lube job at prices raised to capture the value of the accompanying gasoline), requiring cash payments (refusing credit cards), and so on. Furthermore, enforcement of the price regulation itself was imperfect, so some sellers also gained part of the value in the public domain by illegally selling on the black market at prices much higher than would be necessary to clear the market. The point is that the discovery process continued, apparently at an accelerated pace (although this cannot be determined for sure because the discoveries that were stifled by the regulations are not known), but with largely superficial discoveries. The full costs of the regulations will never be known, however, because the path of market evolution was altered (e.g., full service stations never returned after price deregulation), suggesting that at least some of the discoveries which would have arisen had the controls not been imposed, never have. One reason for not returning to the original path is that the initial very profitable (because of the size of the gap between costs and revenues that had been artificially created) entrepreneurial discoveries under the regulatory regime tended to sharpen the awareness of other entrepreneurs to such profits, promoting the emergence of a competitive profit seeking process that quickly evolves along a new path (e.g., see Ikeda (1997:60)), creating a very different market environment for which the post-price-ceiling discovery process proceeds. In addition, the fact that the government had been willing to impose such controls once probably created an expectation that it could do so again, making property rights to value relatively insecure. Therefore, entrepreneurs were probably unwilling to abandon some of the innovations they had discovered that might mitigate future price controls. Another reason is that superfluous discoveries under price controls spawned additional regulations, as Mises predicts (1949:763–764), and even when the price control was abandoned some of the other regulations were not, as noted below.

In this context, augmenting a Misesian analysis of price controls with explicit consideration of efforts to capture property rights to value, as in Cheung’s (1974), is useful because it brings out the complexity of transactions and the multiplicity of attributes to most assets, and illustrates that market participants have many margins besides price and quantity along which they can adjust. Some patterns of superfluous discovery become more predictable. It also illustrates that resources are consumed in such adjustments. This dissipation adds to the rent seeking costs themselves, of course, as it results from the initial attempt to reallocate property rights. The same is likely to be true in any regulatory environment, as illustrated below. Cheung’s (1974) analysis fails to bring out important implications that are

recognized by Austrians, however, in part because he sees the process as equilibrating. In fact, he contends that rational responses by economic agents imply that wealth dissipation should be a constrained minimum, as people should use the lowest-cost methods available to them under the constraints that exist in order to claim the value that the regulations place in the public domain. In other words, *given* the price controls, such adjustments are efficiency enhancing in the sense proposed by the Chicago School in that transactions costs and wealth dissipation are reduced. But this ignores at least two important issues stressed in Austrian analysis: (1) an important cost of regulation is that unknowable “efficient” discoveries that might have occurred in the absence of regulation have been stifled (Kirzner 1985), as noted above, and (2) the consequences of the superfluous discovery process, which directs rents away from their intended recipients, will lead to new regulations (Mises 1949:763–764, Ikeda 1997:99–136, Benson 1999, 2001b).

3.4. *Political Entrepreneurs and More Regulation*

In a rent-seeking society entrepreneurship is not restricted to market innovations. Entrepreneurs may also discover opportunities in the political arena. This may involve the identification of an unexploited political opportunity that can be pursued through the organization and leadership of an interest group. Indeed, entrepreneurship of this kind presumably is the source of the initial demands for regulation. Such entrepreneurship raises the cost of protecting property, as those who lose transfers to this new group now have incentives to organize and attempt to retain their wealth. Therefore, more resources are diverted into the rent seeking arena, raising the resource waste described in the Public-Choice approach to regulation. Indeed, politicians have incentives to respond to the demands of new groups by transferring wealth from unorganized individuals, but in doing so, some of those unorganized individuals are likely to organize in an effort to regain their wealth. Rather than transferring wealth back from the previously favored group, however, the politician has incentives to find wealth that can be taken from as yet unorganized individuals, creating more incentives to organize. Furthermore, because a regulation places value into the public domain and political entrepreneurs, like market entrepreneurs, have incentives to capture it, new interest groups may emerge who are neither initial rent seekers or rent avoiders (examples appear in Section 4). The result is a spiralling process of more and more rent seeking (Buchanan and Tullock 1962, Benson 1984), a process that is at least complementary to, if not dominant in the Austrian political economy description of increasing regulatory intervention (e.g., see Mises 1949:763–764, and Ikeda 1997:99–137).⁷ Note that there are important differences between entrepreneurial discovery in markets, and entrepreneurial discovery in the political arena (e.g., price signals are not likely to be relevant in non-market settings, except through bribery and “contributions”, so barter exchange is generally required), as Ikeda (1997:77–83) explains, but these differences do not alter the prediction made here.

Political entrepreneurs demand regulations expecting their constituencies to benefit from them, but the benefits are dissipated (e.g., as time costs rise for consumers under a price ceiling, for instance, and as both market and other political entrepreneurs adjusted along numerous margins to capture value that was intended for members of the interest group

constituencies). Thus, political entrepreneurs who initiated the original regulations are likely to demand more regulations (e.g., in the price ceiling case, to reduce time costs by instituting some other rationing mechanism such the use of rationing coupons or a lottery—for instance, see Mises (1949:763)) and control the previously uncontrolled margins along which superfluous adjustments are being made (e.g., to prevent reductions in octane levels by firms selling gasoline in the price ceiling case). Bureaucratic enforcement cost will rise as the regulatory apparatus expands to apply these new regulations. If these additional regulations fail to allocate the rents to the targeted group, more regulations will be demanded. Ultimately, deregulation may occur as the regulation effort fails to produce the anticipated rents and political support for the regulations wanes, and as those who discover that they are worse off because of the regulations are organized (probably under the leadership of another political entrepreneur) and demand change. Thus, the price controls on gasoline discussed by Barzel (1989) were short lived, for instance, although other regulations remain that were instituted at the time (e.g., some states set minimum octane levels for various classifications of gasoline to limit unbundling options). Of course, many regulatory regimes, including some involving price-ceilings persist, by continually evolving in the face of market and political changes. An examination of the complex and multidimensional system of New York rent controls would reveal that the regulatory authority has made many changes in additions to regulations, for instance, in an effort to maintain the system. Enforcement and compliance costs rise both to implement the new regulations and to control illegal activities. But more importantly, the path of superfluous adjustments continues and the unmeasurable losses grow as more potential efficient discoveries are stifled.

3.5. *Bureaucratic Entrepreneurs*

Mises (1944:80) explains that

The bureaucrat is not only a government employee. He is ... at the same time a voter and as such a part of the sovereign, his employer. He is in a peculiar position: he is both employer and employee. And his pecuniary interest as an employee towers above his interest as employer, as he gets much more from the public funds than he contributes to them.

This double relationship becomes more important as the people on the government's payroll increase. The bureaucrat as voter is more eager to get a raise than to keep the budget balanced.

In this context, Breton and Wintrobe (1982:108–131) characterize the bureaucratic institutional process as one dominated by Austrian entrepreneurial competition wherein the discovery process involves individual bureaucrats pursuing their subjective goals by selectively seeking and implementing policy innovations. The multi-dimensional competition includes the general struggle for budgets, as well as for power and influence. Bureaucratic power and discretion depend on uncertainty, and bureaucrats can expand that uncertainty through “selective distortion” including: “(i) alterations in the flows of information ...; (ii) variations in the quality or quantity of information leaked to the media, to other bureaus in

the organization, to special interest groups, and/or to opposition parties and rival suppliers; and (iii) changes in the speed of implementation of policies as these are put into effect” (Breton and Wintrobe 1982:37–39). Tullock (1965:193) suggests that when a bureaucracy is set up to accomplish some political goal, it inevitably fails, and

The continuous failures of bureaucracies are met in part by continuing reorganizations, the reasoning being that the failure has resulted from organizational details. In part, the failures are met by concealed shifts in the objectives for the organization. As an experiment, if one examines the original arguments for establishment of almost any government bureau and compares these arguments with those that may be currently offered for the retention of the bureau, one is likely to find that a considerable shift has occurred in the specification of the objectives that the bureau is supposed to attain. The governmental bureau becomes a permanent fixture, with the objective continually changing. Over time the vested interests of the bureaucrats themselves become more and more important in justifying the organization, although this can never be the sole argument in discussions with outsiders.

Bureaucracies fail because of the knowledge problem and the superfluous market and political discovery process. Once a regulatory regime is in place, however, the bureaucratic enforcers have incentives to maintain the system whether it accomplishes its objectives or not, so they have incentives to add more regulations, seek new objectives that might be achieved, and so on.⁸ Thus, the bureaucracy is a spontaneously evolving institution. Even when the demands for regulation wane because they continually fail to provide the anticipated rents, and the demands for deregulation grow as losers organize, the bureaucracy is not likely to disappear. It will have to supervise the deregulation process, after all, and it will probably retain some regulations to enforce as well. Furthermore, with deregulation wealth is again transferred (from those who have captured some rents from regulation) and some property rights temporarily move back into the public domain, waiting to be captured. Reregulation, perhaps in some new form, becomes attractive to some interest groups, and the cycle starts over. A bureaucracy might survive and prosper for a long time in such a dynamic environment even if it is not achieving the “politically efficient” objectives that it was intended to provide.

3.6. *Efficiency Issues Revisited*

When it is recognized that the evolution of a regulatory regime is path dependent, and that at least some transactions costs are endogenous (e.g., created through strategic misinformation releases by bureaucrats) the political efficiency emphasized by the Chicago School is cast in a different light. There may well be incentives to minimize the wealth dissipation that occurs in such an environment, but any efficiency gains that are achieved are specific to the institutional setting. Had a different evolutionary path been initiated, the level of wealth dissipation may well have been considerably less. More importantly, the “opportunity costs” of the regulations include the potential entrepreneurial discoveries that have been stifled by the regulations, costs that are unmeasurable. Thus, the Chicago School’s efficiency

arguments do not really even apply in a second-best sense. Perhaps they might be called “third-best,” but given the dynamic instability that regulation produces, and therefore, the ongoing superfluous discovery process and forgone discoveries that would have occurred in a free market, even this seems inappropriate.

The dynamic instability of a regulatory regime might be thought of as arising from the constant conflict between market, political, and bureaucratic entrepreneurs. Political entrepreneurs attempt to implement artificial constraints on property rights which create rents, but the transactions costs of delineating and enforcing rights mean that market entrepreneurs find margins along which to adjust in order to gain some of the value that political entrepreneurs intended for others. Bureaucratic enforcement efforts expand as new rules are implemented, in an effort to satisfy political demands. The interests of the bureaucrats themselves also come into play, so interest groups rarely get what they expect out of any regulatory process, and ultimately, political support for the regulation can even wane. Despite the resistance of the regulatory bureaucracy, at least partial deregulation may occur [the bureaucracy may survive, however, by enforcing a subset of the previous regulations, or as Tullock (1965) notes, by finding a new purpose].⁹ Let us consider an example—U.S. interstate trucking regulation.

4. An Example: Regulation, More Regulation, and Partial Deregulation of Interstate Trucking¹⁰

The Interstate Commerce Commission (ICC) was established in 1887 to regulate the railroad industry. The political rhetoric of the time claimed that railroads were monopolists and that allowed them to price discriminate. The fact is that railroads engaged in considerable competition in long haul markets, so they set lower rates there than in less competitive short-haul markets. In this setting, many interest groups supported the move to regulate the railroads, including the railroad industry itself. In fact, the railroads may have been the strongest advocates for the formation of the ICC, as they argued that the “ruinous and destructive competition” in long-haul markets led to frequent price wars, keeping prices too low to cover costs, and regulation offered a way of eliminating such unprofitable competition—according to the railroads, ending such competition was good for consumers as it was necessary to guarantee the survival of this “vital” industry. While the Congress may have responded out of benevolence, it appears that they were more concerned with (benevolent toward) some people (like railroad executives and owners) than others (like long-haul shippers and their customers).

Initially the ICC was ineffective as it had the power to declare a particular rate illegal but no power to set rates. Recognize that this was one of Congress’s first major attempts at regulation. The knowledge problem they faced was considerable. They apparently did not anticipate the strategic response of the entrepreneurial railroad executives who would file new rates only marginally different from the one declared to be illegal, and while new hearings followed the new rate remained in effect until a decision was made. As a consequence, Congress was forced to pass a series of additional statutes (e.g., the Hepburn Act in 1906 and the Transportation Act of 1920), first giving the ICC the power to set maximum rates (sounds like consumer interest regulation, but some consumer groups, such

as agricultural shippers, were quite influential), then minimum rates (to prevent destructive competition!), and finally, exact rates.

The resulting prices placed value in the public domain and created incentives for others to find ways to capture it. One way was through the use of other forms of transportation. Kirzner (1985:130) stresses it is competition that keeps the market process going, but competition in the form of freedom of entry as entrepreneurs discover where opportunities are available in the market and take advantage of them. Not surprisingly, competition from barges (both market and political, since the barge industry was able to obtain subsidies from the government in the form of canal building and river dredging), and the new arrival, trucks [both market and political, since the trucking industry was able to obtain subsidies in the form of public road construction (Massa 2000/2001)], began to erode the railroads' profit margins. Thus, railroads demanded additional regulation to prevent or limit such competition, and as Shughart (1990:241) explains, from 1906 onward, "the history of the ICC was basically one of increasing rate-making powers and growing jurisdiction over substitute transportation modes." As Mises (1949:763) predicts, regulation inevitably spread to related markets. A series of statutes expanded the commission's jurisdiction over express companies, pipelines, sleeping car companies, motor carriers (in 1935, as discussed below), and finally (in 1940), coastal and inland water carriers and freight forwarders.

4.1. The Origins of Interstate Trucking Regulations

Around the time of World War I, trucking companies began to make significant inroads into the freight market that had been dominated by railroads. This accelerated during the early depression years of the 1930s as the trucking market was very easy to enter at relatively low costs (e.g., second-hand trucks were widely available), making it attractive for many unemployed workers to become free-lance truck operators. The railroads saw their anticipated rents being captured by others and they reacted. After all, the amount of freight available for hauling was falling due to the depression, so the competitive entry by free-lance truckers put considerable pressure on railroads profits. Railroads still made their greatest profits in the short haul markets, but these were particularly vulnerable to competition from trucking. Therefore, railroads began lobbying for an extension of ICC regulation to the trucking market. As Goodman and Dolan (1985:136) explain, "Such audacious entrepreneurship was intolerable—why couldn't those drivers stay in the soup lines where they belonged? A cry for help went out to Congress and met a compassionate response." The railroads also had a political ally since the new free-lance haulers took revenues away from the trucking firms who had been in the market prior to the depression. These established and politically influential trucking firms argued that regulation was needed to end the ruinous competition in their industry. The result was the Motor Carrier Act of 1935 which brought interstate trucking under the jurisdiction of the ICC. Intrastate trucking was not controlled, however, leaving at least one margin for entrepreneurial adjustment and others also existed, as explained below, so later Congressional, ICC, and state-legislative refinements were made in an effort to control such margins. Consider ICC regulation first. To see how it evolved through statute and bureaucratic initiative, let us examine its two major components: (1) entry control and (2) rate setting.

4.2. *Entry Restrictions*

Entry control was provided for in the Motor Carrier Act of 1935, which gave the ICC the power to issue certificates of “public convenience and necessity.” Supported by the argument that unlimited entry led to ruinous competition, the legislation mandated that an entrant would have to obtain a certificate of public convenience and necessity before transportation services could be offered. This increased the cost of entry, but apparently not sufficiently, as the ICC went further, controlling the number of certificates that were issued (all firms that were in existence prior to 1935 got certificates).

The ICC had to establish standards for awarding new certificates. Requests for operating rights came from both new firms wanting to initiate a new service, and existing firms wanting to offer expanded service. The standard which evolved required applicants to demonstrate that they were “fit and willing” to provide the service and that the service was “required by the transportation needs of the country.” This second requirement essentially meant that an applicant had to show that existing services were inadequate, thus setting up a confrontation between existing carriers who might be threatened by the proposed service or who might want to provide the service after its potential was discovered by an entrepreneur. The ICC certificate application and issuing proceedings quickly came to be dominated by the lawyers employed by existing carriers. Entry by new firms became virtually impossible, as existing firms had the skilled and knowledgeable lawyers who could argue that the proposed service was not “required” since it was already being provided by the existing firms, or alternatively, that existing firms were clearly more “fit” to offer the service than an unknown and unproven entrant. Existing firms definitely had the inside track whenever a new certificate was issued, because they could easily demonstrate that they were “fit and willing.” Thus, the incentives for entrepreneurial discovery by individuals who were not already in the trucking industry were undermined and very few applications by potential new entrants arose over the following decades. Indeed, despite the fact that there were over 100,000 applications for certificates over the next several decades, the ICC blocked virtually all entry (Stigler 1971:5), and the number of interstate trucking firms actually declined from around 26,000 in 1940 to 15,138 in 1972. This decline does not reflect exit due to losses, however. The fact is that because so few certificates were issued, the easiest way for existing entrepreneurs to expand their enterprises was to merge with other firms who already had certificates to operate over other routes. As a consequence, most firms in the industry owned a number of certificates (some as many as 250 by the 1970s). In other words, the incentives of exiting trucking entrepreneurs to look for new opportunities were also undermined. Rather than encouraging competition, ICC regulation encouraged mergers. In the sense implied by the Chicago School, such mergers were efficient because they lead to more efficient sized firms. However, these were superfluous innovations because the certificates themselves defined markets that were inefficiently small (another factor that probably discouraged efforts to enter by new entrepreneurs) within the regulatory environment. Furthermore, they were probably “inefficiently” large relative to what would have been the efficient size in an unregulated market, for reasons suggested below.

The certificates themselves also became quite detailed and restrictive. They specified precisely what could be hauled by a firm as well as the exact route a firm could serve,

including any stops between cities. Thus, the certificates served a second function as well. They divided the entire potentially very-competitive freight market into a huge number of small monopolized markets. When entry is free, a monopoly will attract entrepreneurial innovations to capture some of the profits, but when entry is prevented by the state, the market process is stifled, and the kinds of innovations that might have occurred in the trucking and railroad industries in the absence of such regulations will never be known. While the costs associated with this stifled market process cannot be determined, the wealth dissipation consequences were considerable, as explained below. Before examining this, however, consider the rate setting process. After all, the rental return to these monopolized markets was considerable (Kafoglis 1977). Since it was the certificates that gave trucking firms the monopoly power, they were the artificially scarce “property” that generated the rents, and naturally, the value of those rents which were not dissipated or captured by others (e.g., the Teamsters Union, as discussed below) was capitalized into the price of the certificates. Between 1967 and 1971, for instance, the average price of an operating certificate was \$89,398.

4.3. Rate Setting

The ICC approved rates that were supposedly “just and reasonable.” The procedure for determining this reflected the ICC’s previously established rate setting policies for railroads. They had adopted a rate structure that was known as “value-of-service pricing.” Essentially, this meant that rates were supposed to be proportional to the market value of the product hauled, suggesting that rates were low for agricultural products (reflecting, in part, the considerable political power of agricultural lobbies) and relatively high for manufacturing products. This was a price discrimination system, of course, maintained by legal barriers to competition, and it tended to maximize the profits of the railroads as long as entry by competitive modes could not capture the business of high-value shippers. When trucking firms began to compete with railroads in the 1920s, however, they were naturally attracted to the most profitable markets—transport of manufactured goods, where they could under price the railroads while still covering their costs. This “cream-skimming,” as it was called by the railroads, was an important factor in leading them to demand ICC regulation of trucking. The railroads contended that the evolving trucking industry was undermining value-of-service pricing, and as the ICC began regulating trucking they were doing so, in large part, to protect the railroads from competition. As the trucking industry got more and more competitive through the 1920s and 1930s, however, it also increased its political power. Consequently, powerful trucking interests also had to be considered in the rate setting process, and it was not too many years before the ICC began favoring trucking over railroads. The railroads objected, of course, and in 1940 Congress’ Transportation Act mandated that the ICC should set rate to “preserve the inherent advantage” of each transport mode. By setting rates for the different modes, the ICC was supposed to prevent competition between them. Whichever mode was allowed to set the lowest rate for hauling a particular product between two locations would get all of the business, of course, so inter-mode competition would not occur.

To determine which mode should get to dominate a market, the ICC had to decide which mode had an inherent advantage. The ICC settled on the “fully-distributed-cost” standard, and by including sunk costs as well as marginal costs, they created an environment that was relatively advantageous to trucking. After all, railroads build and maintain their own network (with some subsidies such as land grants, of course) while the highway system is built and maintained by federal, state and local governments [truckers do pay taxes, but the construction of their network is clearly not part of their sunk costs, and they also do not pay the full marginal cost of road maintenance (Massa 2000/2001)]. The allocation process can be illustrated by the famous and often cited *Ingot Mold* case. Ingot molds were transported from Neville Island, Pennsylvania to Steepleton, Kentucky. They could be shipped by rail or by a truck-barge combination. The fully-distributed-cost for the truck-barge arrangement was set at something close to marginal cost since highway and waterway construction costs were not considered. The costs were estimated to be \$5.19 per ton. The fully distributed costs for the railroad was estimated to be \$7.59 per ton since it included part of the cost of the railroad’s construction and maintenance. The estimated marginal cost for the railroad was approximately \$4.69, but under the ICC’s policies, the truck-barge arrangement naturally got all of the business. Similar results arose in many other markets, so the ICC’s rate setting standards shifted a great deal of freight traffic to trucking that could in fact have been more efficiently hauled by rail (the major shifts occurred in intermediate length hauls, as the railroads still had an advantage over long hauls even under this pricing structure). This was done by setting the minimum price that each mode could establish. Ironically, the railroads had lobbied for trucking regulation in an effort to avoid competition in the market place but effective market and political entrepreneurship by members of the trucking industry ultimately reallocated the regulatory rents. In all likelihood, railroads would have maintained a larger share of the transportation market in an unregulated system, but they failed to anticipate the consequences of the regulatory regime that they helped to establish.

The ICC also established a system of regional rate bureaus to determine specific trucking rates (e.g., determine the level of fully-distributed costs). The rate bureaus were organizations of the regulated trucking firms which determined the rates to be set over all the thousands of certified services. These bureaus were in direct violation of Antitrust laws, so one of the statutes Congress had to pass (the Reed-Bullwinkle Act of 1948) in order to legalize trucking regulation as established by the ICC, was an exception of this rate setting system from the antitrust laws. The rate structure proposed by the rate bureaus had to be approved by the ICC, of course, so this oversight review, it was argued, would keep the rates low and fair to consumers. However, ICC commissioners are presidential political appointees that have to be approved by the Senate, and these appointments are made in light of the demands of powerful interest groups. Through much of its history, the most powerful groups interested in interstate trucking regulation were the regulated trucking firms and the Teamsters Union (which also benefited tremendously from regulation, as explained below). Thus, the Commission was more concerned with maintaining a profitable environment for the firms than in keeping rates low for consumers, incentives that were reenforced by the fact that former ICC commissioners almost always found attractive employment opportunities as officers in regulated firms, consultants and lobbyists for the industry, or partners in law firms representing the trucking firms with their large regulatory caseloads.

Not surprisingly, as Breen (1978) reports, interstate rates were consistently between a third and two-thirds higher than intra-state rates for the same weight and distance shipped. ICC regulated rates for comparable services were 39.7 (36.1) percent higher than intra-Maryland rates in 1973 (1974).

Another study, one of several by Moore (1983), concludes that ICC regulated rates were consistently kept between ten and twenty percent higher than they would have been in a competitive environment, and that this imposed a cost on the rest of the economy of about \$4 billion per year. This estimate is probably a dramatic underestimate of the true costs however. After all, it does not even include much of the rent-seeking costs, and more importantly, many of the market innovations discussed below were superfluous, and more importantly, there is no way of knowing what kinds of innovations might have been discovered in an unregulated transport sector. After all, given the market divisions produced by the regulations, the discovery process for each industry tended to be narrowed and channeled. In the absence of regulations, railroads might have developed high speed lines for short hauls, for instance, while truckers might have developed more cost effective long-haul institutions and equipment.

While Moore's (1983) \$4 billion estimate is actually closer to an estimate of Chicago-School deadweight losses than to Public Choice rent seeking costs, and definitely does not recognize the potential costs of stifled discoveries, it is interesting to consider in this context because it illustrates that various groups can capture parts of the value that artificial regulatory constraints create. This value definitely did not all go to trucking firms as annual rents. Part was dissipated, and part was captured by others as they adjusted along margins left uncontrolled by the regulatory regime. Indeed, some of these adjustments reduced the rents available for capture. Let us consider some of the reasons for wealth dissipation first, and then look at the kinds of adjustments made to reduce this dissipation and to capture the rents that were created by the artificial scarcities generated through regulation.

4.4. The Dissipation of Value

The effort to prevent competition and generate rents resulted in a very complex system of rates and certificates. Therefore, compliance costs were substantial. For instance, the firms had to employ clerical staff to keep records for the ICC, lawyers to pursue new certificates and/or oppose the granting of certificates to new entrants, and lawyers to negotiate mergers and acquisitions. They had to send representatives to the rate bureaus, lobby the ICC for rate or route changes, lobby Congress for additional legislation and enforcement resources as other groups attempted to avoid the losses or capture some of the benefits from regulation, and so on. Other firms who wished to enter also bore lobbying costs and application costs, and groups attempting to avoid the loss of wealth or rents (e.g., various shippers, including agricultural groups, small business organizations, manufacturing groups, other transport modes such as railroads) also incurred ongoing costs.

Complying with the certificates themselves also generated considerable wealth dissipation due to the designation of both routes and commodities that could be hauled. Routes were designed to go through specified "gateways" or check-points where shipments could be monitored, but these gateways could add considerable mileage to a shipment. One firm

had a certificate to haul from Cincinnati to Indianapolis, and from Indianapolis to Louisville, for example, but no certificate to haul from Cincinnati to Louisville without going through the Indianapolis gateway. It is 217 miles from Cincinnati to Louisville through Indianapolis but only 101 miles over the direct highway between the two cities. In another situation one trucking firm had a certificate to haul paper cups with handles and another firm had a certificate to haul paper cups without handles, so trucks from both companies had to haul from the same paper cup factory. Another firm got in trouble with the ICC for hauling farm tractor blades when its certificate was for industrial blades—the difference between the two was that farm blades were painted red while industrial blades were painted yellow. Such obvious and even silly inefficiencies create opportunities for entrepreneurs to reduce costs, of course, but the potential for doing so was limited. The primary legal method was through merger, and this is one reason for the large number of mergers in the trucking industry discussed above. As the ICC contended, mergers often were efficiency enhanced, but probably because they provided a means for reducing the dissipation of wealth that resulted from the ICC's regulatory policies rather than (or perhaps in addition to) the scale economies that might drive mergers in an unregulated market (in this case, however, at least some of the scale economies were superfluous to the degree that they were due to economies in compliance and/or political action). And mergers clearly were not sufficient to eliminate all of the dissipation of wealth that resulted from the regulatory regime. For instance, certificates also designated the direction that a product could be hauled. Thus, a firm might hold a certificate to haul a particular product from point A to point B, but no certificate to haul anything from B to A. Another certificate could certainly exist that provided for the shipment of some other commodity from B to A, creating the opportunity to merge in order to avoid empty backhauls for two separate trucking firms. Nonetheless, a study of capacity utilization found that between 43 and 52 percent of ICC regulated trucks were running empty at any point in time between 1940 and 1963, suggesting that empty backhauls were widespread, and that more trucks were needed to haul interstate freight than otherwise would have been required. Of course, empty backhauls raised measured (accounting) costs and these costs could be passed on to customers through the rate setting process, making the firms relatively indifferent about the issue. At any rate, Moore (1983) estimates that about \$1.4 billion out of the \$4 billion in extra social costs was due to the “waste” arising as a result of compliance costs, gateway restrictions, empty backhauls, and other inefficient allocations of resources arising from the regulatory process. These estimates do not include the direct rent seeking costs associated with lobbying Congress, the ICC, or the rate bureaus, competing for new certificates, and so on. Indeed, the costs of maintaining the ICC bureaucracy itself can also be considered as a “waste” in the Public-Choice sense, since its function was to generate rents (transfer wealth). And of course, the unknown costs of stifled discoveries may outweigh all of these factors.

4.5. *Competition to Capture Rents*

Trucking firms were not the only parties with incentives to reduce wealth dissipation, of course. Shippers certainly had strong incentives to do so, and to avoid the transfer of rents to the trucking firms. One way to avoid the high prices and inefficiencies associated

with regulated trucking was for shippers to vertically integrate. Thus, many large shippers developed their own transportation divisions with their own trucks, even though this was not their comparative advantage. Such adjustments were clearly superfluous, then. Others chose to exploit political margins, seeking exemptions from the regulations, for instance, or supporting the subsidization of other forms of freight transportation, such as the maintenance of canals and rivers for barges, airports for air freight, and so on. The agricultural sector was quite successful in this regard. Congress mandated that carriers of agricultural shipments were exempted from ICC entry controls and pricing policies. And not surprisingly, a large black market in interstate transportation developed, with so-called “gypsy” carriers (trucking firms without ICC certificates, perhaps licensed for intrastate trucking) offering to transport freight across state lines at prices below the regulated carriers (other substitutes were also made relatively more attractive, such as shipment by air). By the 1970s the regulated carriers were only hauling about 30 percent of the interstate trucking freight, due to factors such as the exemption of agricultural products, the vertical integration by many large shippers, and the extensive use of gypsy carriers.

No doubt other adjustments also occurred that were less obvious because, as Mises (1949:763) predicts, they took place in other sectors affected by the regulations. Over a span of 40 plus years prior to deregulation (discussed below), for instance, location patterns for production probably changed relative to what they would have been if the market for transportation services had been more competitive. Production technology was probably also influenced. For example, relatively high transportation costs may have stimulated many technological innovations that made geographically dispersed production in relatively small plants relatively more attractive and geographically concentrated production in large plants less attractive (e.g., technological changes in steel production are consistent with this suggestion, as the most efficient plants prior to trucking regulation were very large while the most efficient plants today are much smaller and much more geographically diversified; of course, a number of other factors may help explain these technological changes as well). Other technological changes that reduced the weight and/or bulk of various products were probably also stimulated at least in part by an effort to avoid high transportation costs. Furthermore, the advantages gained by the trucking industry through the regulatory process created incentives for the suppliers of trucks to compete for part of the resulting rents by offering larger and/or more fuel-efficient trucks capable of hauling more at higher speeds, thereby reducing some of the losses arising from inefficiencies discussed above. These kinds of changes are much more difficult to attribute to the regulatory environment, of course, but the point is that entrepreneurs had incentives to explore all uncontrolled or ineffectively enforced margins. Organizational changes (e.g., vertical integration), marketing changes (e.g., gypsy carriers, air freight), and political action (e.g., agricultural exemption) all occurred, and it would be very surprising if technological innovations were not also pursued. In addition to reducing wealth dissipation, these activities reduced the rents available to be captured by the trucking firms (and others discussed below—e.g. the members of the Teamsters Union) and the level of wealth that was dissipated in the pursuit of those rents. They clearly were efficiency enhancing in the sense suggested by Cheung (1974), given the regulatory system that existed, although many would not have been efficient in a different (i.e., unregulated) institutional environment.

Other parties were also in a position to capture some of the rents generated by the regulations. In particular, it would be relatively difficult to unionize an industry in which the firms have wheels and can move to another city or state whenever they are threatened by an effort to organize laborers. Furthermore, even if a trucking firm was unionized in the absence of ICC regulation it would be difficult to raise wages if a non-unionized firm could enter the market. But ICC regulation meant that firms could not move and competitors could not enter. Furthermore, the lack of competitive entry and the rate setting process allowed the firms to pass a larger portion of high union wages on to customers, so the firms' incentives to resist unionization were relatively weak. Indeed, the rise of the International Brotherhood of Teamsters gave the trucking firms a political ally in the competition with railroads to gain rents through ICC regulation, even though the firms then had to compete with the Teamsters for the resulting rents. Thus, the firms faced tradeoffs with reasons to both support and resist union power. The Teamsters took full advantage of the situation, and according to Moore (1983) about \$1.2 billion of the annual \$4 billion in his estimates of higher costs arising from ICC regulation was captured by the Teamsters in the form of wages and benefits that exceeded what they would have been in a competitive market. This argument is supported by the consequences of deregulation.

4.6. *Partial Deregulation*

ICC regulation of interstate trucking "survived" for over 40 years, suggesting that it must have been "efficient" in the political sense that the Chicago School stresses. However, it did so only through an evolving process of "more regulation" as additional statutes were added and the ICC's regulatory policies became increasingly complex. The fact is that the system really never achieved an equilibrium in any meaningful sense, as entrepreneurial discoveries in the competition for rents and efforts to reduce the dissipation of wealth produced continuous organizational, technological, and political changes.

By the late 1970s the political demands for maintaining the regulatory system were substantially weakened. Clearly, the railroads who had initially been strong supporters of regulation of trucking had suffered a significant loss under the system that evolved as the trucking firms and Teamsters gained political strength. By diverting shipments away from regulated carriers (through vertical integration, the use of gypsy carriers, geographic diversification of production, political exemption, etc.) shippers had recaptured much of the wealth that had been thrown into the public domain. The Teamsters had also captured a substantial portion of the rents, further undermining the firms' incentives to invest in maintaining the existing regulatory environment. The large interstate trucking firms were still benefiting from regulation, but the marginal benefits were clearly declining (and some trucking entrepreneurs probably felt that they were efficient enough to be very competitive in an unregulated market, and therefore able to capture a number of routes from less efficient firms who had grown complacent under regulatory protections). After all, many of the rents had been capitalized into the price of certificates, and therefore, they were captured by the initial certificate holders, many of whom sold them, rather than by the firms who acquired them through mergers. The losses in these artificial values would be born the owners at the time of deregulation, of course, and they were, as noted below, so many trucking firms clearly

had incentives to resist deregulation unless they could be compensated for these losses in some other way. Such compensation did materialize for some firms, at least to a degree, as the bargaining power of the Teamsters was reduced, along with wages, and many existing firms were able to expand their business considerably, as explained below. The Teamsters had strong incentives to resist deregulation, of course, as did the ICC bureaucracy (although political manipulation by those seeking deregulation helped undermine the bureaucracy in this case, as explained below). In the face of the weakening support for regulation, however, demands for deregulation was also growing.

Throughout the 1960s and much of the 1970s presidential/senate-approved appointments to the ICC continued to be made in response to the demands of the trucking firms and the Teamsters union, who responded with campaign contributions and votes for the helpful senators and presidents. Thus, the political heads of the ICC were strongly supportive of ongoing regulation, and the bureaucratic apparatus continued to support the existing firms. The election of President Carter brought a different perspective to ICC regulation, however. He had strong political ties to the small-business community, large portions of which suffered under the high minimum rates for trucking that the ICC was supporting and the ongoing inefficiencies of the system. Carter appointed three commissioners who were strong advocates of competition in the trucking industry. Thus, the Teamsters and regulated firms found themselves without strong political allies at the ICC for the first time in decades. While the industry and Teamsters continued to resist the administrations deregulation efforts, they were ultimately forced to accept legislation that provided for deregulation, in part because they feared that the Carter appointees would make even more radical reforms in favor of shippers than Congress mandated in the Motor Carrier Act of 1980. The bureaucratic rank and file may not have wanted deregulation, but the ICC was not going to be dismantled. They were, in fact, very busy after deregulation, as explained below, because they still had the authority to issue and approve certificates, for instance—they just had to issue a lot more of them and make them a lot less restrictive. In addition, civil service protections also mean that the rank and file were not likely to be dismissed, and at the same time that industries like trucking and airlines were being deregulated, the federal government was increasing other types of regulation (e.g., health, safety, environmental) so they may have recognized that there were still many opportunities for employment.

This discussion may suggest an alternative “deregulation” hypothesis to the one implied in Section 3. A political regime shift (i.e., Carter’s election) might be the explanation. There were many regimes shifts between 1935 and 1980, of course, so advocates of this hypothesis would have to explain why only this one mattered. Perhaps because Carter was a “Washington outsider” who suffered from severe knowledge problems and misread the political signals? Indeed, Carter may have made a political mistake, as the Teamsters shifted their support to the Republicans in the next election and he failed to be reelected.¹¹ But if this is the case then why was regulation not reinstated by the subsequent administration or the one after that? The answer appears to be that there actually was a change in the relative power of competing interests. Carter and his new commissioners gained sufficient support for his small-business constituents to push through deregulation legislation.¹²

The consequences of deregulation were immediate and substantial. By 1982 prices had fallen 25 percent from their 1975–1977 levels and average compensation for Teamsters fell

by 19 percent over the same period. The accounting rate of return on investment for the large interstate trucking firms fell from 24 percent prior to deregulation to 11 percent in 1981. Of course, the immediate period following deregulation saw a severe recession, so these reductions were not entirely due to deregulation. Nonetheless, revenues per ton for a truckload of freight were down by 22 percent in 1986 compared to the pre-deregulation period.

Prices fell for several reasons. The Motor Carriers Act of 1980 removed the antitrust immunity of the rate bureaus and instructed the ICC to eliminate its restrictions on service to intermediate points on delivery routes, and on return trip haulage. The Act resulted in a tremendous increase in the number of applications for ICC certificates by existing firms seeking expanded authority and by new firms. The portion of applicants that were by new firms rose from 7 to 13 percent in the first year after deregulation, suggesting that incentives for entrepreneurs to look for opportunities in the freight market were significantly stronger. And the ICC's certificates were no longer so narrowly defined. Firms applied for permission to haul "food and related good," or "all retail goods," or simply "general commodities," rather than paper cups with handles or farm tractor blades. And they applied for permits that were also broader in a geographic sense—state to state rather than city to city, or from one city to "all points in the United States." Large numbers of new certificates granting much broader operating authority were issued, and the market price for certificates plummeted (about \$750 million in artificially-created capitalized rental returns to certificates was apparently destroyed, or more accurately, transferred to new entrants, shippers, and consumers).

The ICC was very busy after deregulation. In fact, it had an \$80 million budget in the first year after deregulation was mandated, when it granted 27,960 new routes (compared to 2,710 in 1976, for instance) and 2,452 new firms entered the industry. The number of ICC-certified carriers reached 33,548 in 1984, up from about 15,000 in 1972 and 18,000 in 1980. Thus, prices fell due to increased competition, and due to the fact that the empty backhaul virtually disappeared, as did the extra mileage from gateway restrictions and the other inefficiencies associated with narrowly defined certificates. Other costs fell as well. In particular, the Teamsters were forced to accept a temporary wage freeze, and a number of the entering firms were non-union carriers, reducing the ability of the Teamsters to demand higher wages in subsequent years. Another consequence of increased competition was significant improvements in the quality of services. One survey of shippers found that 86 percent felt that the quality of services improved as their prices fell, with 47 percent finding service to be more prompt and 73 percent finding it to be more readily available.

While these changes in property rights and the resulting distribution of rents and wealth are dramatic, the trucking market is actually only partially deregulated. After all, the ICC was not dismantled and its budget remains quite substantial, as suggested above. More importantly, entry is not completely free, and neither is pricing (Shughart 1990:242). The commission still has the power to review rail and trucking rate changes and to deny them if they fall outside a prescribed "zone of flexibility." And the degree to which competition has been accommodated clearly has varied since 1980, depending on the political environment (Shughart 1990:242). Finally, it should be noted that the trucking industry still benefits from substantial subsidization because the taxes they pay for roads are lower than the cost of providing them with roads, and this subsidy clearly has not fallen since deregulation (Massa 2000/2001). Thus, freight hauling is a long way from being a free market.

5. Conclusions

The Chicago-School conclusion that regulation is “efficient” in a transaction-cost or deadweight-loss minimizing sense are not only uninteresting, but wrong. Furthermore, the Public-Choice perspective severely under-predicts the opportunity costs of regulation. These predictive errors arise because both schools of thought rely on static equilibrium models rather than recognizing that regulation actually involves an effort by special interests to influence the allocation of property rights in a continuous path-dependent spontaneous evolution driven by market, political, and bureaucratic entrepreneurship in an ongoing discovery process. That this characterization of regulation is much more appropriate than the Chicago-School and Public-Choice models is revealed above by an examination of the historical evolution of interstate trucking regulation (but any other regulatory environment should be similar). The dynamic instability of this regulatory regime arises due to the constant conflict between market, political, and bureaucratic entrepreneurs’ discovery processes. Political entrepreneurs attempt to implement artificial constraints on property rights which create rents, but the knowledge problem and the transactions costs of delineating and enforcing rights mean that both market and other political entrepreneurs discover margins along which to adjust in order to gain some of the value intended for others. Bureaucratic enforcement efforts expand as new rules are implemented to constrain superfluous market discovery processes. The interests of entrepreneurial bureaucrats also come into play, so interest groups rarely get what they expect out of any regulatory process, despite continual changes in it in an effort to block various discovery processes that frustrate the intended regulatory outcome, and ultimately, relative political support for strong rate and entry regulations waned. Partial deregulation occurred. The on-going rent seeking costs of this process have been tremendous, but perhaps the most significant costs are the entrepreneurial discoveries that have been stifled due to regulation which has redirected entrepreneurial activities in superfluous directions.

Notes

1. The following discussion categorizes various “schools” of thought (Chicago, Public Choice, Austrian, New Institutional) in order to label different perspectives on the political economy of regulation, recognizing that the “schools” are far from homogeneous so many people who might identify themselves with one of them may not adopt the views as described here in their entirety.
2. Many New Institutionalists certainly recognize important consequences of ignorance, spontaneous order, and even entrepreneurship, although they do not play the central role in this approach that they do in Austrian analysis, and many of the subtleties and nuances of Austrian analysis are, therefore not recognized. Similarly, Austrians obviously recognize the vital role of property rights, of course, but they tend to be much more central to at least some New Institutional analysis (e.g., as in the work of North (1981, 1990), Cheung (1974), and Barzel (1989), among others), and as a consequence, some Austrians miss the subtleties and nuances of property rights analysis.
3. See Benson (1995) for a review of the theoretical and political literature.
4. The opposite inference, that the Austrian approach under-estimates the consequences of regulation by ignoring the interest problem, might also hold, although it is not extensively addressed here. After all, while Austrians can point out, quite correctly, that even if government officials were benevolent, thus undermining the Public Choice model, it does not follow that market intervention is desirable because of the knowledge problem (e.g., see Ikeda 1997:8), Public Choice scholars can counter, using fundamental assumptions of methodological

individualism and subjective value, that even if the knowledge problem facing government officials could be solved, it would not follow that market intervention would be desirable. Indeed, the tendency of the Austrian literature to assume benevolence has always been surprising to this author, given Austrian emphasis on methodological individualism and subjective values (surely the subjective values of the individuals who make up government institutions should matter?). In this context, Ikeda (1997:150) suggests that since Public Choice and Austrian Political Economy appear to be quite complementary, particularly once the static equilibrium focus of Public Choice is dropped, it may well be appropriate for public-policy theorists to attempt to combine the two into “a general theory of political economy.” This paper involves an attempt to at least take a few steps in that direction.

5. It should be noted, in this context, that property rights precede the rise of the state (Ellickson 1993, Benson 1999). The state is not the source of property rights, but the state is a threat to property rights because of its coercive power and ability to reassign or attenuate rights.
6. Neither Mises nor Cheung explicitly begin their analysis of price controls with interest groups demanding such regulation, but assume that such a group successfully lobbies a legislature to set prices below the market clearing level in order to transfer wealth to consumers from producers. Rent controls are expected to benefit tenants rather than landlords, for instance, and they arise in communities with large populations of renters who have considerable political influence.
7. Political entrepreneurs might also pursue political offices where they are in a position to make and/or enforce rules in ways that will generate personal benefits [for instance, once in office they may simply have to threaten to reallocate some property rights in order to extract part of the existing rents for themselves (McChesney 1987)]. Furthermore, the bureaucratic institutional process can be characterized as one dominated by “entrepreneurial competition” in an Austrian sense (Breton and Wintrobe 1982:108–131), as explained next. Also recall the issues raised in note 4 and recognize that in the context of traditional Austrian political economy, which assumes benevolence on the part of the government, notions of political and bureaucratic entrepreneurship cannot be convincingly motivated.
8. Note in this regard, that recognition of self-interested rather than benevolent government employees strengthens some of the implications of Austrian political economy and weakens others. The prediction that regulations will spawn more regulation is certainly strengthened, for instance, and the responses are likely to be much quicker (Ikeda 1977:145–150). Indeed, as Ikeda (1997:76–77, 146, 81) points out, given his assumption of benevolent government officials, it is difficult to “even speak of a governmental process in which public agents spontaneously adjust to changing circumstances” in part due to the fact that the kinds of signaling and exchange mechanisms that develop in government (log-rolling, campaign contributions, bribery, budget maximizing efforts) are “inconsistent with a public interest viewpoint”, leading to an absence of “self-correcting mechanisms.” However, when bureaucrats are seen as self-interested entrepreneurs, as in Breton and Wintrobe (1982) then it becomes clear that they create various kinds of institutional arrangements (e.g., the informal networks that Breton and Wintrobe stress) to facilitate bargaining in the “political equivalence of barter” (Ikeda 1997:88). It also becomes clear that they have incentives to respond to political signals that are analogous to (but less accurate than) price signals, such as interest group lobbying and campaign contributions [as well as bribes (Benson 1988) which are more analogous to market prices except that they are payments for the “illegal” transfer of property rights controlled by the bureaucrats], and these signaling mechanisms will develop as special interests seek rents. In this regard, and in contrast to Ikeda’s (1997:150) then, it may be that dropping the benevolence assumption does “substantively” alter the conclusions of Austrian political economy.
9. Deregulation is not likely to be stable either, as the same dynamic is still in place. Thus, federal deregulation might occur, while state-level regulation increases, for instance (e.g., Labaton (2002) points out that the federal deregulation process has led to substantial increases in state level antitrust activities, environmental regulation, and regulations in areas such as consumer safety, telecommunications, banking, health care, and energy).
10. The following discussion is drawn from several sources, including MacAvoy and Snow (1977), Moore (1978, 1983, 1988), Carlton and Perloff (1990:825–834), Shughart (1990:240–242), and Goodman and Dolan (1985:133–144).
11. Carter’s deregulation efforts were only some of the actions that he took, of course.
12. Political entrepreneurs were successful, at least in part, because they tied deregulation into an anti-inflation agenda. Reported inflation rates rose dramatically from an estimated 4.8 percent in 1976, when Carter was

elected, to over 13 percent in 1979, so the administration was under considerable pressure to reign it in. Recognition that regulated freight rates were high was increasingly widespread, and rational ignorance on the part of voters regarding the true sources of inflation, combined to create support for deregulating rates as an inflation fighting tool.

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