Opportunities Forgone: The Unmeasurable Costs of Regulation*

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Economic regulation is often justified, at least allegedly, because of market failure, but recognition that government also can fail suggests that regulation of market activity can generate net losses in social welfare rather than net benefits. Special-interest or rentseeking theories of regulation [e.g., Stigler (1971), Tullock (1967)] offer insights regarding the potential magnitude of such welfare losses. These models tend to rely on static equilibrium analysis, however, and they often fail to consider the knowledge problem facing entrepreneurs in the political, bureaucratic and market processes that are bound together through regulation. These characteristics of such models mean that the costs of regulation tend to be underestimated.

The following analysis characterizes economic regulation 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 ongoing market, political and bureaucratic discovery processes. The opportunity costs of such a regulatory environment are emphasized. In particular, deliberate efforts to impose rules create incentives to find and exploit uncontrolled margins in order to avoid the full consequences of

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the rules (Benson 2002, 2003). Thus, the market 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 may never be made. The opportunity costs of regulation include such lost discoveries. In addition, regulation creates a Awholly superfluous@ discovery process as Aentirely new and not necessarily desirable opportunities for entrepreneurial discovery@ (Kirzner 1985: 144) are created, yet another source of opportunity costs that a static model does not reveal.

Furthermore, the perception that rents are available through political action means that some entrepreneurial efforts will be shifted out of the market process and into the political arena where individual look for potential rent-seeking opportunities (Benson 2002, 2003). Therefore, in a larger macroeconomic sense, the ease of property rights alterations through the political process means that property rights become increasingly insecure, shortening time horizons and reducing incentives to innovate and produce in the economy as a whole, not just in the regulated market.

The static-equilibrium model of special interest regulation

Economic regulations provide benefits for Aspecial interests@ who are able to influence the political process by imposing costs on individuals who have less political power.¹ Monopoly is not a market failure that demands regulation in order to move in the direction of

^{&#}x27;Two prominent strands of Aspecial interest@ regulation have developed in economics. The Chicago School's focus on regulation was stimulated by Stigler (1971) while the rent-seeking literature of the Public Choice School traces its roots to Tullock (1967). These two literatures actually have much in common (Tollison 1982), so the following overview of static special-interest regulation models draws freely from both. They do diverge, however, particularly in their conclusions regarding the efficiency of such transfer processes. See Benson (2003) for discussion.

Pareto optimality, for instance, but rather, it is a product of government actions to provide wealth (monopoly rents) to politically powerful firms through actions such as the division of potentially competitive market into exclusive marketing territories, creation of legal barriers to entry, and/or imposition of limits on price competition (Tullock 1967, Stigler 1971).

Rather than focusing on rents or wealth, define the object of exchange as (Benson 1984): a) the assignment of property rights, and b) enforcement of property rights assignment. After all, property rights dictate the distribution of rents and wealth. Therefore, changes in property rights destroy some rents and create others, and as a result, transfer wealth. Whenever an interest group is successful in altering the assignment of property rights, other individuals lose. 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.² More importantly, this

²Stigler (1971) and others who adopt the interest group theory of government assume that the object of interest group demand is a transfer of wealth. This might be 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. While potential self interest motives can often be identified for groups seeking changes in regulations, many members of the relevant groups firmly believe that the changes they demand are in the Apublic interest.@ Of course, the Apublic interest@ is what each individual subjectively believes it to be, and if Awealth@ is broadly defined to mean well-being or satisfaction there may appear to be little cause for confusion. However, with this definition the model can lose considerable predictive power as testable hypotheses are not readily apparent. Similarly, 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 Aeconomic returns.@ Again, if rents are considered more broadly to include gains in well-being or satisfaction the model can lose predictive power. Therefore, the focus here is on the allocation of property rights. As a result, the model applies to members of groups like the Sierra Club and the American Civil Liberties Union who may not think that they obtain any personal gain (wealth, rents) from political actions (even though they clearly gain subjective value). Furthermore, the property rights

perspective will facilitate the transition to and understanding of the evolutionary arguments developed below.

Tullock (1967) emphasized the striking analogy between monopoly achieved through regulation, tariffs achieved through legislation, and theft. Consider Tullock's (1967) analysis from this property rights perspective. Theft is an attempt to claim assets or resources that are not perfectly protected -- 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 then points out that precisely the same analysis applies to the political transfer process [or rent-seeking process], but as with theft, if property rights were perfectly delineated and perfectly secure there could be no rent seeking. It is because rights are somewhat less than secure that they are vulnerable to takings through the political process. This insecurity means that some individuals and groups expend resources in an effort to get property rights altered so that the assets will be used as they want them to be, and others expend resources in an effort to defend their claims. Both theft and rent seeking arise because property rights are not perfectly and completely delineated. Because the resources used in seeking alterations in and defending property rights have opportunity costs (they could be used to produce new wealth rather than to transfer existing wealth), Tullock (1967) emphasizes that they are Awasted@. These Tullock costs (e.g., lobbying and investments in political support) are necessary for rentseeking, however, as they provide important signals and coordination mechanisms for the political process in the absence of money prices (Benson 2002, 2003).

transfers they may achieve do tend to redistribute rents and wealth, so others are worse off and are likely to resist such changes.

The opportunity cost of rent seeking is even greater than the suggestions made so far, however, even in a static equilibrium model. When rents are available (property rights are vulnerable to transfer) different individuals and/or groups may have incentives to try to capture them. Thus, competition for rents arises, given that a process exists to facilitate such competition [an issue examined in Benson (2003)]. Several different rent seekers may invest resources in an attempt to gain the same rents, and while some may ultimately win rents that more than compensate for their investments; others do not. Indeed, the entire value of the rents may be dissipated in the competitive process, suggesting that to measure the social cost of a static monopoly one should include not only the dead-weight loss triangle, but also the transfer from consumers to producers (the monopoly rent rectangle) (Tullock 1967; Posner 1975). This may not be the case, since factors such as risk aversion and high transactions costs for organizing a rent-seeking group and enforcing the group's decisions can reduce the dissipation of rents, but under some circumstances the dissipation can even be greater than the rents that are transferred (Tullock 1980).

Tollison (1987) explains that there are at least two stages to the rent-seeking game. The first stage involves legislative creation of artificial barriers in a market in order to generate the potential for rent flows.³ Because of the focus on reelection by politicians and the rational ignorance of voters regarding issues that do not have large per capita impacts on their well being, political decisions made by elected officials tend to be made on the basis of a limited time horizons (Lee

³Many of the characteristics of the legislative process appear to have evolved to facilitate the signaling of interest group demands, and the exchange of special benefits (property rights assignments and their accompanying rents) for election support (Benson 2003). The committee system, logrolling, and PAC contributions, and negotiations in the agreed bill process are all part of this political process which corresponds (imperfectly) to the price system in markets.

and Buchanan 1982). Politicians have little motivation to consider consequences much beyond their next reelection efforts. Thus, politicians who impose regulations that provide relatively immediate rents to particular powerful individuals or groups obtain short-term reelection advantage over opponents who contended that such regulations have a significant negative impact on economic activity. By the time the potential evidence accumulates the election is over. Furthermore, it tends to be very difficult to measure the negative consequences of pre-election political actions or determine the causal linkage (furthermore, as explained below, those individuals or groups that do recognize their losses can be compensated with subsequent transfers with delayed negative impacts). As Lee and Buchanan (1982: 354) note, Aso long as government makes its ... decisions on the basis of a time horizon shorter that the period required for full ... adjustment to ... changes, observed tax rates will be higher [and observed regulations creating artificial rents will be more abundant] than those that a far-seeking or 'enlightened' government would impose.[®] This also adds impetus for a path dependent evolution of regulations, however, as explained below.

Once the regulatory apparatus is in place, rent seekers must compete to capture the rents that arise due to the artificial barriers (Tollison 1987). They must gain licenses or franchises and prevent the granting of additional entry rights to others, obtain exclusive marketing territories and make sure that those territories are not reduced, influence the rate setting process in order to maintain high prices, and so on. Of course, when enforcement and rule making powers are delegated by legislatures to agencies, the incentives of these bureaucrats must also be examined to see if they prefer to regulate as the legislature and interest groups want them to, unless the bureaucracies are effectively controlled so that they only do what the legislators allow. In a static setting regulatory authorities can be viewed as firms producing a service or a set of services -of legislatively-determined enforcement regulatory policies. Enforcement authorities exchange their enforcement services

for a budget. This type of exchange has been modeled by Niskanen (1975), assuming that a bureau manager is a utility maximizer with income and non-monetary perquisites (e.g., prestige, staff support, travel, leisure time or shirking, social and physical amenities, discretion to do the job) as arguments in the utility function. Income and perquisites are in turn assumed to be functions of both bureau output (i.e., the size of the bureau) and the discretionary budget. The bureau also can face active oversight monitoring from sponsors (e.g., legislators, interest groups). Control devices go beyond direct monitoring but such constraints are, nonetheless, imperfect, leaving bureaucrats with some, and often considerable, discretion. Niskanen's (1975) bureaucratic model has been adapted to describe a regulatory process (Benson and Greenhut 1986). The model predicts that mangers of enforcement bureaus prefer stricter enforcement of whatever market regulations exist than the legislature wants. Bureaucratic agencies also will try to inefficiently enforce rights in the sense of spending a larger budget per unit of enforcement than is necessary, if they can appropriate part of the budgets allocated by the legislature for their own benefit. Clearly, bureaucrats are not totally free to pursue their own goals, but some discretion remains (Benson 1995). Adding bureaucratic enforcement to the static regulatory model clearly adds additional resource costs to the regulatory process, thus reinforcing the conclusions of the rent-seeking literature. After all, the resources consumed in bureaucratic regulation also have opportunity costs in that they could be used for productive purposes, but because of the rent-seeking process, they are diverted to the production of transfers. Thus, for instance, the cost of monopoly include the traditional deadweight loss triangle and the opportunity cost of the resources consumed in rent seeking competition (perhaps approximated by the monopoly rent rectangle), plus the opportunity cost of the resources allocated to the regulatory bureaucracy which tend to be relatively large due to bureaucratic incentives and imperfect legislative control.

Given imperfect monitoring and the resulting bureaucratic discretion, those who want to avoid losses can also continue to compete in the second stage in an attempt to minimize loses, even if the first stage goes against them. Much of this competition focuses on the regulatory commissions or bureaucracies that the legislature establishes to create and maintain the artificial rents. This second stage of competition obviously could have feedback effects, however, if, for instance, bureaucratic decisions frustrate either interest-group or legislative intentions. This suggests that the regulatory process could have important dynamic implications. Indeed, these implications may be even more important determinants of the opportunity costs of rent seeking than those implied by the static analysis of interest group competition or bureaucratic performance.

The dynamics of a regulatory process

The transactions costs of fully delineating property rights and of enforcing any property rights that are assigned, especially if the assignment arises though special-interest regulation, mean that enforcement will be imperfect (Barzel 1989, Benson 2002, 2003). This in turn implies that property rights to an asset or resource are never likely to be perfectly delineated and secured: some value will remain Ain the public domain@, using Barzel's (1989) terminology. Incentives always exist to discover ways to capture such value, creating new incentives for entrepreneurial individuals to develop political or market innovations that allow them to capture some of the rents. Thus, a regulation leads to spontaneous responses, many of which are not anticipated by members of the interest groups, the legislature, or the regulatory bureau (Kirzner 1985: 133-145, Ikeda 1997: 94-99 and elsewhere, Benson 2002, 2003).

The spontaneous evolution of regulation

A spontaneous order is often contrasted to a deliberately designed social arrangement created by some centralized ordering

authority. In a static framework such a designed order might appear to be reasonable, but in a dynamic world it is not. The evolution of regulation and regulatory institutions clearly involves deliberate Ahuman 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 Aisolated 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 2002, 2003).

The knowledge problem suggests, among other things, that there 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. As Kirzner (1985: 135) stresses, a market remains even though regulations are instituted. The regulations alter incentives, redistribute income, and alter the process of production as well as the composition of consumption [an example is provided below, but also see Benson (2002) for a detailed description of the evolution of interstate trucking regulation in light of entrepreneurial actions], but exchange continues as does the entrepreneurial discovery process. Because of the change in incentives regarding access to rents, regulations will significantly impact the discovery process, however, as efforts are made to find and exploit the uncontrolled margins and/or avoid the full consequences of the rules (Benson 2002, 2003). The discovery process continues but along a new path. As a consequence, discoveries which probably would have been made in the absence of the regulation are stifled and never made (Kirzner 1985: 141-144). This unmeasurable consequence of regulation may well be the most significant microeconomic cost of rent seeking, although the static equilibrium analysis of special-interest regulation (or public-interest regulation, for that matter) does not reveal it. Furthermore, regulation creates a Awholly superfluous@ discovery new opportunities are opened up along a new process as evolutionary path that is not likely to be desirable (Kirzner 1985: 144), either from the perspective of the interest groups involved or from an efficiency perspective.

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 one likely response is new rules intended to block such maneuvers. Those subject to the new rules react again, however, leading to more pressures, new blocking efforts, and so on.

Therefore, deliberately designed rules and institutions also evolve spontaneously as regulators, interest groups, and market entrepreneurs attempt to discover ways to achieve their subjective and often conflicting ends. In other words, the evolution of intentionally created rules also is path dependent, 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 2002, 2003).

Market entrepreneurship in a regulatory environment

An entrepreneur is someone who intentionally searches for opportunities to expand personal well being. In an unregulated (free) market economy characterized by limited knowledge, 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 Aerror@ (or a Adifference 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. Thus, as Kirzner (1997: 62) explains, entrepreneurial discovery of opportunities in a market 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.

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 supposed to go to members of powerful interest groups. Perhaps this can best be illustrated by an example.

Consider 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? The standard neoclassical textbook prediction is that a permanent shortage arises with a price ceiling. However, the contention that the shortage is borne proportionately, randomly, or even arbitrarily, ignores the potential for rational responses by individuals to the resulting situation. Essentially, the price ceiling is indented to transfer rents to consumers but it actually puts the value between the price consumers are willing to pay and the legal price into the public domain, creating incentives for buyers and sellers to attempt to capture that value. For instance, consumers compete for the limited supply by searching and queuing, activities that raise the Afull price[®] consumers pay. 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 entrepreneurial buyers and sellers will Atake advantage of disequilibrium conditions@ (Kirzner 1985: 129) by making adjustments that lower their costs or increase their benefits.

Barzel's (1989) discussion of an example, the price ceiling on gasoline during the early 1970s, suggests the kinds of reallocations of resources and superfluous discoveries that inevitably arise. In this case, sales were in terms of tanks of gasoline, so consumers actually 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) in order to avoid running out of gasoline, raising their time costs even more. To avoid some of these time costs, some consumers (particularly those with trucks, pickups, and perhaps large cars) added gas-tank capacity, and others with high time values paid 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 Aservices@ 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 for those services raised to capture the value of the accompanying gasoline), refusing to sell on credit, and so on.

These adjustments were perfectly consistent with the regulations on price, and therefore legal, because the regulation did not control any of the margins of adjustment other than price. 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 a free 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., the massive shift from full service to self service stations was never reversed after price deregulation⁴), suggesting that at least some of the discoveries which would have arisen had the controls not been imposed, never have been. One reason for not returning to the original path in this case is that the initial, very profitable entrepreneurial discoveries under the regulatory regime, tended to sharpen the awareness of other entrepreneurs to such profits,

⁴See note 6 for discussion of the motivations for and consequences of deregulation, and see Benson (2992, 2003) for more details.

promoting the emergence of a competitive profit seeking process that quickly evolves along a new path [e.g., see Ikeda (1997: 60)], thus creating a very different market environment from which the postprice-ceiling discovery process proceeded. In addition, a different set of expectations applied post-regulation, than those that had existed before regulation. After all, 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 the distribution of deregulated value relatively insecure. Another reason is that as superfluous discoveries under price controls spawned additional regulations (e.g., minimum octane levels for categories of gasoline), and even when the price control was abandoned some of the other regulations were not.

Cheung=s (1974) explicit consideration of efforts to capture property rights to value is useful because it brings out the complexity of transactions and the multiplicity of attributes to most assets, illustrating that market participants have many margins besides price and quantity along which they can adjust. Indeed, some patterns of superfluous discovery become predictable [e.g., see Benson (2002, 2003)]. It also illustrates that resources are consumed in such adjustments. This dissipation adds more costs to the rent-seeking process, of course, as it results from the initial attempt to reallocate property rights. Thus, rent seeking and rent avoidance costs are not simply the costs of political activity. They spill into the regulated market as well, and the opportunity costs of resources used in the superfluous adjustments that arise as entrepreneurial producers and consumers attempt to capture value by adjusting along uncontrolled margins and new paths should be considered as part of wealth dissipation that occurs in such an environment (Benson 2002, 2003). Similarly, the opportunity costs of stifled discoveries can be very high. Cheung's (1974) analysis of price ceilings fails to bring out some important implications, however, in part because he sees the

process as ultimately equilibrating.⁵ This ignores the fact that since the superfluous discovery process directs rents away from intended recipients, those target recipients are likely to demand even more regulations (Ikeda 1997: 99-136; Benson 2002, 2003).

Political entrepreneurs and more regulation

⁵In fact, Cheung (1974) contends that rational responses by economic agents imply that wealth dissipation should be a constrained minimum, as people 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 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. Political entrepreneurs demand regulations expecting the benefits to accrue to the entrepreneur and the members of his organization, but many of the benefits are dissipated (e.g., as time costs rise for consumers under a price ceiling, for instance), or redirected (e.g., 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 as the use of rationing coupons) and control the previously uncontrolled margins along which superfluous adjustments are being made [e.g., new regulations were created in many states 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 entrepreneurial adjustments ultimately mean that these additional regulations fail to allocate the rents to the targeted group, more regulations will be demanded.⁶ Enforcement and compliance

⁶Deregulation may also occur (although it is likely to be only partial, as the bureaucracy will probably survive as will some form or regulatory activity) if the regulation effort fails to produce or protect most of the anticipated rents and political support for the regulations wanes (Benson 2002, 2003). Thus, the price controls on gasoline discussed by Barzel (1989) were short lived (probably not a generalizable example since they were actually part of a massive wage-price freeze that proved to be extremely costly and disruptive), for instance, and partial deregulation has occurred for such markets as interstate trucking, airlines, some financial markets, long distance telephone markets, and some state electric utilities markets. Even in these cases, related regulations often remain. 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

costs rise both to implement new regulations and to control illegal activities (e.g., black market sales in the case of a price ceiling). But more importantly, the path of superfluous adjustments continues and the unmeasurable losses grow as more potential efficient discoveries are stifled.⁷

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. Similarly, interstate trucking has been deregulation but its regulation, discussed in Benson (2002), continued for about 45 years, in part by changing dramatically over time as both market and political entrepreneurs discovered ways to avoid or redirect the rents and political and bureaucratic entrepreneurs attempted to prevent such adjustments. Furthermore, despite deregulation, the bureaucratic apparatus remains in place and seems to have a lot of work to do.

⁷Some regulatory rents are likely to be captured by the intended recipients, but they are then capitalized into the value of artificially created unique assets such as licenses or quota rights. If the regulations do not create such artificial assets then the rents tend to be capitalized into the price of assets that are uniquely suited for capturing the intended benefits (e.g., the value from farm subsidy programs tend to be capitalized into the price of farm land). Capitalized rents are captured by those individuals initially own the relevant unique assets, and subsequent entrants must purchase these assets. Over time, as such assets are exchanged, new market participants will not benefit from the regulatory limitations, so they have incentives to demand new types of regulations in order to obtain rents. Thus, even if anticipated rents are not diverted through superfluous market innovations, more regulations are likely to be added over time as the membership in relevant interest groups evolves.

Bureaucratic entrepreneurs and policy changes.

Breton and Wintrobe (1982: 108-131) characterize much of what bureaucrats do to be Apolicy advocacy@ rather than simply the policy implementation implied by static-equilibrium models, and characterize the bureaucratic institutional process as one dominated by Aentrepreneurial competition@ wherein individual bureaucrats pursue their subjective goals by selectively seeking and implementing policy innovations. The multi-dimensional competition includes the general struggle for budgets, as well as competition for positions and promotions in the formal bureaucratic structure.

Bureaucrats have clearly demonstrated a willingness to Apropagate@ their own policy agendas.⁸ Furthermore, they have a relative advantage in interest group competition. They are already organized, and they are naturally well informed about a narrowly focused political issue. Bureau managers also can generally appropriate a portion of their discretionary budgets to cover some or all of their lobbying costs while other interest groups generally have to solicit contributions. In addition, they have ready access to elected officials who pass laws and set budgets, as they are virtually always called upon to provide Aexpert opinions@ and evidence when issue that affect them are considered.

Bureaucrats' power and discretion depend on the degree of uncertainty, and they themselves are often in a position to expand that uncertainty through Aselective distortion@ (Breton and Wintrobe 1982: 39). Thus, the oversight sponsor faces the duel problem of determining

⁸See Benson (1995) for a review of the relevant literature.

both what the bureaus output should be from a political perspective, and how it should be produced, with the potential for bureaucrats misleading them on both counts. Bureaucrats also have incentives to Aeducate@ sponsors, by selectively informing law makers of the strength and wishes of other interest groups. Consequently, interest groups press their demands to bureaucracies as well as (or instead of) to legislatures, as suggested above. Yet another implication is that bureaucrats have incentives to Aeducate@ potential interest group allies and to Apropagate@ their agenda indirectly through Apublic information@ or miss-information campaigns. Indeed, competitive strategies employed by entrepreneurial bureaucrats include:@(i) alterations in the flows of in information or commands as these move through or across the hierarchical levels of the organization; (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: 37-38). These strategies and selective behavior in general are possible because of the way bureaucratic organizations and hierarchies work, including the fact that monitoring by superiors and sponsors is costly and the measurement of bureaucratic performance is generally difficult or impossible. Indeed, such strategies increase monitoring costs and make measurement of performance even more difficult. After all, individuals who depend on a particular bureaucratic process for their livelihood have strong incentives to maintain it and prevent the implementation of competitive alternatives.⁹ Thus, as Tullock (1965:

⁹Others may also support the bureaucracy in this regard. Individuals facing large potential losses due to the discretionary application of complex rules will seek specialists in interpreting rules and avoiding their consequences. Like bureaucrats, however, these specialists (e.g., lawyers, accountants) also rely on the process and its complexity for their livelihood, so they have incentives to resist changes in the system that might reduce the demand for their services, and to

193) explains, when a bureaucracy is set up to accomplish some political goal, it inevitably fails (e.g., for reasons suggested above, as entrepreneurs find ways to exploit uncontrolled margins), and

> (t)he 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.

demand stronger barriers to exit from the jurisdiction in which they have developed specialized expertise.

Market entrepreneurs also have incentives to limit or prevent competition and to raise monitoring costs, of course. However, they do not have the power to prevent entry (unless they lobby a legal authority to do it for them). Furthermore, they cannot force people to use their services (unless that power is provided by the state), while the policing and collection agents of a coercive authority (e.g., a state bureaucracy) can do so. Therefore, the ability to raise transactions costs by entrepreneurs in competitive markets is significantly limited relative to the ability of agents for legal authorities. Indeed, high transactions cost processes are relatively less likely to persist in a free-market economy, as entrepreneurs will be attracted to the situation by the profits that will arise when a lower cost option is offered.

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 now objectives that might be achieved, and so on. Thus, the bureaucracy is a spontaneously evolving institution.¹⁰

Conclusions: the opportunity costs of regulation

The static rent-seeking model recognizes that there is a deadweight loss due to monopoly, quotas, and other forms of regulation, because the marginal value consumers place on another unit of the good (the price they are willing to pay) exceeds the marginal cost of the resources needed to produce it, but in addition, rent-seeking competition consumes resources and adds to the cost of regulation. Essentially, potentially productive resources are diverted into the political competition for rents and as a result, the economy cannot reach its production possibility frontier.

¹⁰Even if the demands for regulation wain 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 [e.g., see the discussion of the Interstate Commerce Commission's role in trucking regulation and deregulation in Benson (2002)]. Furthermore, with deregulation wealth is again transferred (e.g., from those who have paid prices for licenses, quotas, farm land, etc., which reflect capitalized regulatory rents) 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 Apolitically efficient@ objectives that it was intended to provide.

Victims of the transfer process have incentives to defend their property rights, and while part of these defense costs are rentavoidance costs arising through investments in political information and influence (rent-avoidance costs), there are other options for potential victims to pursue. Exit may be possible, for example, whether by moving to an alternative political jurisdiction, or by hiding economic activity and wealth (e.g., moving transactions Aunderground@ into black markets). Yet another option, as Kirzner (1985) stresses, is that market entrepreneurs can find many opportunities to make what tend to be Asuperfluous,@ but nonetheless profitable, adjustments in the face of the artificial regulatory constraints, that frustrate the intended objectives of the regulations by diverting rents. Therefore, rule makers will generally have to create new rules and/or expand the enforcement bureaucracy, in an effort to prevent exit, to execute the rules as intended, and to block to superfluous adjustments. Ignoring the opportunity costs of such superfluous innovations for now, these enforcement efforts are still another source of opportunity costs that accompany a regulatory wealth transfer process.

The transactions costs of assigning and enforcing property rights mean that entrepreneurial opportunities to exploit uncontrolled margins inevitably exist, so the disequilibrating consequences of efforts to use legislation and regulation to produce wealth transfers may be much more significant than any of the consequences discovered through static equilibrium analysis. Kirzner (1985) explains that one consequence will be the stifling of some types of entrepreneurial innovations in the regulated market. Potentially beneficial (wealth increasing) innovations will not occur as entrepreneurs are diverted along a new evolutionary path involving superfluous innovations that are motivated by efforts to capture artificially created rents. Such Amicroeconomic@ effects may be far more costly in the long run than the dead-weight and ATullock@ costs identified in the rent-seeking literature. Furthermore, there is a broader Amacroeconomic@ effect as well, as suggested by North

(1981, 1990): faced with the probability of involuntary transfers, productive individuals' property rights to their resources, wealth, and income flow are perceived to be relatively insecure, so their time horizons are relatively short, reducing incentives to invest in maintenance of and improvements to their assets, and their incentives to earn income and produce new wealth that might be appropriated, also are relatively weak. Thus, a rent-seeking society is, in a macro sense, a relatively unproductive society. As the rent-seeking process becomes more intrusive, property rights become increasingly insecure, and the opportunity costs of regulation can become tremendous, stagnating an entire economy or putting it into absolute decline, not to mention the corruption, violence, disease, starvation, and other drastic consequences that typically arise in such economies.

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