

**DIVISION OF THE HUMANITIES AND SOCIAL SCIENCES
CALIFORNIA INSTITUTE OF TECHNOLOGY**

PASADENA, CALIFORNIA 91125

WHAT IS REGULATION?

Roger G. Noll

Presented at the Conference on the
Growth of Regulation, July 1979.
Sponsored by the Hoover Institution
on War, Revolution and Peace



SOCIAL SCIENCE WORKING PAPER 324

June 1980

ABSTRACT

The economics literature contains no consistent, generally accepted definition of regulation. Some standard references define regulation as the control of prices, profits and entry in the utility sector, while others include in the definition literally every public policy that alters market outcomes, including tariffs, commodity-specific taxes, and import quotas. This paper argues that definitions should have a basis in theory, and that regulatory research suggests three levels of generality of public policy that correspond to coherent theoretical analysis: the previous two, plus an intermediate level that covers the use of administrative processes to control private market interactions. Regulation is argued to be most appropriately applied to this intermediate level, and examples are given to justify the usefulness of the proposed classification scheme.

WHAT IS REGULATION?

Notes on the Ontology of Regulatory Policy

Roger G. Noll

In the good old days when economists focused attention almost exclusively on market behavior, the typical publication in the economics of regulation did not have to worry about defining terms. The topic of a paper was usually the effects of a particular form of regulatory policy (e.g. price regulation of utilities or spectrum allocation in broadcasting). All that such a study normally needed was a clear definition of the salient features of the policy that was the object of the study. These policies were normally regarded as exogenously determined; the issue at hand was to use microeconomic analysis to see how a firm constrained by these policies could be expected to behave in its market activities.

This kind of research does not really need a clear definition of a term like "regulation" other than as a vehicle for advertising courses and textbooks. Generic aggregations of different policies need not be precisely defined when the focus of research is a particular detail, or a component of the aggregate. Whether commodity-specific tariffs are taxes, regulations, or trade barriers in the minds of economists will affect the content of courses and textbooks, but not research.

My claim is that the need for more precision arose when economists began to regard policy instruments as endogenous. Three related questions have arisen in both the scholarly literature and the policy debate over regulatory reform during the decade of the 1970s: why does Congress pass regulatory laws, what are the consequences of different institutional approaches to the same policy objective, and why do regulatory agencies structure their decision-making processes as they do? In the 1930s political scientists began to suggest that regulation was a form of special-interest legislation that actually helped the people who were regulated. In the 1970s, more elaborate but generally similar theoretical statements appeared in the economics literature.

At this level of analysis, the research questions become generic. In order to explain why regulation might be selected over another policy (including doing nothing other than to allow the continuing development of case law as it applies to a particular industry or market problem), the policy option "regulation" has to be well-defined, as do its alternatives. Similarly, in order to answer questions relating to the selection of policy options by a regulatory agency (including options about structure and procedures), one has to know what the agency is free to do as a regulatory agency--that is, one needs an accurate legal definition of regulation as it pertains to that particular agency.

To illustrate the point, I shall cite some passages of a paper by Alain Enthoven and me. The problem was to try to convince some noneconomists that there were better ways for dealing with the

problem of rapidly rising expenditures on medical care than to impose more layers of regulation on the health sector. In order to make the point, the institutional choices had to be made clear:

To date, three generic types of policy responses to the problem of rising health expenditures have been proposed. One is to increase greatly the share of medical costs that is paid by the patient so that consumers will have much more incentive to economize on medical services. A second is to leave intact the incentives for increasing expenditures in the fee-for-service, cost reimbursement, third-party intermediary system, but to impose economic and technical regulation on providers in an attempt to prevent the incentives from producing their natural effect. The third is to restructure the delivery and payments system in a manner that alters the basic financial incentives facing providers so that they find it in their interest to provide good quality but cost-effective care. The main thesis of this paper is that spending on health services cannot be effectively controlled in the present political context without the use of a policy of the third type.[/]

[/]Alain Enthoven and Roger Noll, "Regulatory and Nonregulatory Strategies for Controlling Health Care Costs," in Stuart H. Altman and Robert Blendon, eds., Medical Technology: The Culprit Behind Health Care Costs? U.S. Department of Health, Education and Welfare, publication (PHS) 79-3216, 1979, p. 215.

against risk. The aim: maximum public control with minimum public resources."/

—/Wilcox and Shepherd, p. 331.

Wilcox and Shepherd implicitly, and Kahn explicitly, exclude all public policies other than standard economic regulation from their attention. In the age of EPA and OSHA, this exclusion seems bizarre; however, even in 1970, when Kahn's book was published, the Food and Drug Administration was an important, mature regulatory agency, and the Atomic Energy Commission had been regulating nuclear safety and licensing nuclear power facilities for sixteen years. In Kahn's two volumes, FDA is mentioned once in a footnote, and the AEC is not mentioned at all. Wilcox and Shepherd have brief sections about both, but neither are called regulatory agencies. The FDA is in a section entitled "Promotion and Subsidies," and is cited as an example of policies to promote consumer interests, while the AEC is discussed as an example of public enterprise because of its dealings in the uranium market. Both books have extensive sections on television regulation (and both call the process regulation), yet neither discusses explicitly how the original definitions appear to exclude this policy from the regulation category.

Kahn does state more precisely the focus of his inquiry: what he terms "economic regulation," which in turn is defined as control of either prices or entry. According to Kahn, "The government

regulates many industries that are not really public utilities. Conversely, even among the 'public utility' industries or at least at their periphery the regulation is often incomplete--control over price but not entry (for example, in insurance), over entry but not price (for example, in radio and television), or quality of service (for example, in banking), and so on."/ It is left as an exercise for

—/Kahn, p. 13

the interested reader why this excludes the FDA or AEC, or even tort law, from the definition, and how the above is to be squared with the earlier definition.

Kahn struggles for the first fifteen pages of his text with what amount to definitional issues because he seeks generality. "This book springs from a conviction that valid scientific generalizations can be drawn and useful general guides to regulatory policies can be developed. Their intelligent application in particular situations, like the decision to regulate in the first place, can only be done on the basis of full consideration of the special characteristics of the industry in question. . . . But the job is likely to be very badly done if it is not informed by a clear grasp of the common economic principles and considerations."/

—/Kahn, pp. 13-14.

Approximately at the same time as Kahn's book was published,

For the choice among these alternatives to be clear, each has to be well defined, including the phrase "economic and technical regulation."

REGULATION IN THE LITERATURE

Despite the value of clarity in definition when the nature of the policy intervention is endogenous, the literature is relatively barren of attention to definitional issues. Most papers do not address the issue. When the issue is addressed, the standard approach is usually that of the widely used undergraduate text by Clair Wilcox and W. G. Shepherd: "Regulation is what regulators do."[/] Moreover,

[/]Clair Wilcox and W. G. Shepherd, Public Policies Towards Business, 5th ed. (Homewood, IL: Richard D. Irwin & Co., 1975), p. 331.

what they are said to do is typically to regulate utilities, as these passages from the two leading texts make clear.

There are at least two large chunks of the economy that the competitive market model obviously does not describe or even purport to describe. These are the huge and growing public sector . . . and the public utilities, in which . . . the central economic decisions are subject to direct governmental regulation.

. . .

There are four principal components of this regulation that in combination distinguish the public utility from other sectors of

the economy: control of entry, price fixing, prescription of quality and conditions of service, and the imposition of an obligation to serve all applicants under reasonable conditions.[/]

[/]Alfred Kahn, The Economics of Regulation, Vol. I, pp. 2-3.

To "regulate" has at least three definitions. One is the tough and unilateral: "to govern or direct according to rule." Another refers to compromise and smoothing over: "to reduce to order . . . to regularize." And another is superficial, perhaps empty: "to make regulations."

The classic, optimistic image of regulation fits the first definition, as follows. A utility sector is a natural monopoly, and so its firms are given franchises as exclusive suppliers to their areas and put under a regulatory commission. This Commission has full information on the utility and great skill in analyzing it. The Commission sets "fair" ceilings on the utility's prices and profit rates, and ensures that the utility price structure is "just and reasonable." The utility must supply all customers at those constrained prices. The Commission monitors service quality and, if necessary, prevents the utility from being inefficient.

Regulation therefore aspires to ratify monopoly where--and only where--it is necessary in the public interest, to prevent exploitation by the producer while reaping economies of scale, and yet to avoid using public capital, subsidies, or guarantees

James McKie published a paper that could not be a better example of the type of generalization that Kahn was seeking. It develops what amounts to a functional definition of regulation as is the case in the two texts that are cited, but even though McKie was primarily concerned with public utilities, he managed a functional definition that cuts a broader swath. The opening pages of McKie's essay, one of my favorite statements in the literature on regulation, strike me as the most complete, well-conceived version of the idea that "regulation is what regulators do." Here are a few excerpts.

The number of economic variables and policies that a business enterprise must determine somehow in running its internal affairs and its relationships with the outside world is formidable enough to discourage those who would attempt to control them all in order to make the enterprise conform to a predetermined plan. The following is only a summary list.

The price structure--minimum prices, maximum prices, the degree of discrimination

Non-price aspects and marketing methods

Competitive tactics

Efficiency of production; minimization of costs

Quality of service, in several dimensions

The rate of return

Investment and extension of service by type and area

Financial management

Innovation and choice of techniques

Purchasing policy

Employee relations--composition of the labor force, productivity, wages and other terms of employment, collective bargaining

Structural organization, acquisitions, integration, affiliation.

Control over these variables by the management of the enterprise itself is never complete, even with full access to information and complete internal authority. An outside agency like a public utility commission faces a far more difficult task--or would if it tried to control the organism completely. But a commission does not try to control it completely. Ideally, it tries to make the enterprise conform to a few simple performance criteria, leaving other matters to the discretion of its management.

No doubt the regulators' task would be simpler if there were an isolated mechanical correspondence between certain of the above-mentioned elements of business policy and the dimension of performance that the regulators wish to affect. If their primary purpose were to prevent excessive returns in a protected monopoly situation, a simple limit on rate of return would then be enough. Some complications arise because regulatory authorities actually apply a variety of welfare criteria, which do not always reconcile with each other. But the main source of complications is, of course, the interconnections among the decision variables themselves. . . .

Any regulatory commission that tries to control these effects by regulating additional variables such as cost performance,

executive salaries and perquisites, choice of technical methods and rates of innovation, will quickly find its hopes to economize the means of regulation evaporating. As it extends further into the network of enterprise decisions it may discover that still other compensatory changes partly frustrate its efforts, and there are always more just over the horizon. Extension of control in response to perpetually escaping effects of earlier regulation may be called the "tar-baby effect," since it usually enmeshes the regulatory authority in a control effort of increasing complexity with little gain in efficiency but a growing feeling of frustration.

—James W. McKie, "Regulation and the Free Market: The Problem of Boundaries," Bell Journal 1, no. 1 (Spring 1970):7-9.

As a definition, this states that regulation is an attempt to alter some of the performance criteria of a firm by controlling some of the specific decision variables that a rational firm, in the absence of regulation, would attempt to control. Moreover, it states that because of linkages among the decision and performance variables, some aspects of firm behavior may be altered even though they are not directly related to the purposes of regulation. Indeed, McKie believes that regulation is inevitably an ever-expanding morass of rules and controls because of the underlying problems associated with attempting to influence performance indirectly.

The difficulty with McKie's functional definition is that,

like the regulatory tar-baby effect, one seems to get in too deeply. This is exemplified by George Stigler's conception of regulation as stated in his roughly contemporaneous, highly influential article. Even more than Kahn envisioned or McKie addressed, Stigler seeks truly cosmic generalization--why does regulation happen at all? In following the functional tradition of the economics literature to its logical end, the approach is, in my opinion, mortally wounded by the reducto ad absurdum in the opening passages of the article.

A central thesis of this paper is that, as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit. There are regulations whose net effects upon the regulated industry are undeniably onerous; a simple example is the differentially heavy taxation of the industry's product (whiskey, playing cards). These onerous regulations, however, are exceptional and can be explained by the same theory that explains beneficial (we may call it "acquired") regulation.

. . .

The state has one basic resource which in pure principle is not shared with even the mightiest of its citizens: the power to coerce. The state can seize money by the only method which is permitted by the laws of a civilized society, by taxation. The state can ordain the physical movements of resources and the economic decisions of households and firms without their consent. These powers provide the possibilities for the utilization of the state by an industry to increase its profitability. The

main policies which an industry (or occupation) may seek of the state are four.

The most obvious contribution that a group may seek of the government is a direct subsidy of money.

. . .

The second major public resource commonly sought by an industry is control over entry by new rivals.

. . .

A third general set of powers of the state which will be sought by the industry are those which affect substitutes and complements. Crudely put, the butter producers wish to suppress margarine and encourage the production of bread. The airline industry actively supports the federal subsidies to airports; the building trade unions have opposed labor-saving materials through building codes.

. . .

The fourth class of public policies sought by an industry is directed to price-fixing.¹

¹George J. Stigler, "The Theory of Economic Regulation," Bell Journal 2, no. 1 (Spring 1971):3-6.

To Stigler, virtually every public policy affecting business is regulation. The full text of the preceding passage mentions the whiskey tax, oil import quotas, tariffs, as well as the more prosaic policies of setting prices and controlling entry. Richard Posner

has stated that even the laws governing marriage, divorce and sexual behavior probably should be regarded as "regulation" according to this definition. All that Stigler excludes is the first category of public policies, direct cash subsidies, but this should probably have been included, too. If entry is controlled and income effects are ignored, application of the Coase Theorem produces an identity between taxes and subsidies for achieving regulatory ends (such as in environmental policy). Moreover, for every subsidy there is some corresponding coercive tax to finance it. Thus, if taxes are to be admitted to the regulatory domain, it seems logical to include subsidies as well. Otherwise, a purely functional definition of regulation must be abandoned in favor of an arbitrary one that has the following form: Regulation is all coercive acts of government designed to affect private decisions except the taxes collected and expenditures made for the purpose of bribing firms to alter their economic or political behavior.

Indeed, an even more fundamentally arbitrary distinction arises in the functionalist approach. In some instances regulatory authorities award damages if a licensee imposes some harm on a customer of the regulated firm. An example is the payment to airline passengers if they are "bumped" from an overbooked flight. Similarly, tort and contract law contains numerous rules, developed through legal precedent, that accomplish the same type of ends. Are the latter regulations? Moreover, legislators often pass specific laws to undo some development in tort law or to put an end to an uncertainty concerning liability in some particular area. An example is the Price-Anderson Act. limiting the liability of owners of nuclear power plants in case of an

accident. Here the interplay between case law and legislative law is so complex that clear boundaries cannot be drawn between them. Logic compels the conclusion that on a purely functional basis there is really no difference between the two, and that regulation should include tort and contract law. Not even an appeal to legislative action can save the distinction: legislators have not elected to overturn most case law--is this not implied legislative approval?--and, in any case, independent regulatory authorities develop case law in much the same fashion as the courts and without explicit legislative review.

Stigler's insight is basically correct. If regulation is regarded as any policy that alters market outcomes by exercising some coercive power of government, almost nothing is excluded. The preceding nit-picks aside, Stigler's logic in including things like the whiskey tax, tariffs, and oil import quotas in a functional definition of regulation is unassailable.

AN INTERMEDIATE VIEW

Probably most economists, and certainly most lawyers, political scientists, government officials, and businessmen would be quite uncomfortable to stop the inquiry at this point and give up on any more specific definition of regulation. Is it true that no useful levels of generality stand between specific regulatory policies (e.g. price regulation of utilities) and literally every microeconomic policy instrument employed by government? Obviously not. Stigler lists some specific instruments: tariffs, taxes, entry controls,

price controls, and building codes. Presumably environmental controls, safety and health standards, and other forms of so-called social regulation are subsumed under his "economic regulation" title, for they are related closely to things that are mentioned.

This type of categorization based upon the type of policy instrument used would probably not satisfy noneconomists. It still overlooks a central feature of regulation that seems essential: regulation is not just what regulators do, it is also how they do it. To a lawyer, the study of regulation is the study of a branch of administrative law. In turn, administrative law is rooted in Constitutional principles that place important constraints on how certain kinds of policies are implemented.

The key issue that is overlooked in most of the literature on the economics of regulation is the role of administrative law in the process. If the legislature is to set up an agency to oversee the operation of a particular industry or to affect a particular performance criterion of industries generally, the regulatory rules it issues must be made by application of an information-gathering and decisionmaking process that satisfies legal principles of due process. These requirements are stricter for decisions by agencies than for acts of Congress, yet less strict than most court procedures. Hence, the selection of a regulatory policy to be implemented through a regulatory agency is a selection of procedures and standards of decisionmaking that differ from the procedures and standards applied to other kinds of government actions.

The preceding suggests a definition of regulation that

combines the functional with the procedural. The following summarizes the essence of such a definition.

As used here, regulation refers to a type of social control of transactions that is characterized by its procedures as well as by the substantive purpose of the regulation. The two key characteristics of regulation are as follows. First, the regulatory authority is not a party to the transactions it regulates. Instead, it acts as the referee of transactions between other parties. By contrast, eligibility requirements and cost reimbursement formulas for Medicare or Medicaid recipients are not, in this sense, regulations because they are written by the purchaser of the service. These controls are more properly regarded as terms of a contract between a purchaser and a vendor. While these controls are likely to be subject to the same kinds of political and legal problems that plague regulation, their development and promulgation is by an agency with a direct budgetary stake in the outcome. Consequently, the agency is directly accountable for the financial implications of its decisions, whereas a regulatory agency is not. Second, regulation is operated according to procedural rules that were developed from case law and formalized after the fact in the Administrative Procedures Act of 1946. The most important features of these rules are that decisions must be based on evidence that is presented in formal proceedings, that substantial evidence must be submitted in support of each decision, and that

the courts may review a decision if it is appealed by a participant in the regulatory proceeding. By contrast, conditions on government purchases and subsidies do not have such elaborate procedural requirements.¹

¹ Enthoven and Noll, p. 217.

The two-dimensional definition of regulation is an intermediate level of generalization that produces a coherent separation of public policies. At some higher level of generality are all business policies, much as the list in Stigler's paper or the functional concept implicit in McKie's list of business decision variables that government might decide to try to control or constrain. At a lower level of generality are specific categories of regulatory agencies. At the same level of generality are business policies that have different procedural rules, such as decisions about support prices in agriculture, or pieces of legislation that state specific rules for business that, if propounded by an agency, would be "regulatory" because they would be subjected to procedural requirements (an example is the first stage of the fleet mileage fuel efficiency requirements on automobiles).

APPLYING THE FUNCTIONAL-PROCEDURAL DEFINITION

The key to the value of the definition of regulation based on both function and procedures is whether it is useful for analysis. I claim that two types of research questions apply to regulatory policies as so defined, which justifies making some distinction of--

inventing a word for--this policy instrument and function compared to others.

The first is that knowledge of regulatory procedures is valuable in predicting the outcome of regulatory processes. Once an agency is established, procedures may determine the nature of decisions, and before an agency is established, knowledge of procedures will be useful in predicting the differences in consequences between regulation and other policies. I cite three examples in this category.

1. The response of utility regulation to inflation. Paul Joskow¹ has examined in detail the consequences on utility regulation

¹Paul L. Joskow, "Inflation and Environmental Concern: Structural Change in the Process of Public Utility Price Regulation," Journal of Law and Economics 17, no. 2 (October 1974):296-99.

of the inflationary period that began in the late 1960s. The argument he presents is an example of how to use structural features of the regulatory process as an important element of a prediction about the performance of a regulated sector. Joskow's brilliant paper illustrates how explicit consideration of structural and procedural issues are used to generate testable hypotheses about regulatory outcomes.

Recently the salient features of Joskow's ideas have been formalized, and the results in terms of the implications for utility behavior are quite striking compared to the previous theoretical literature built around the Averch-Johnson hypothesis.² Thus, Joskow's insights,

¹H. Stuart Burness, W. David Montgomery, and James P. Quirk, "The Turnkey Era in Nuclear Power: A Case Study in Risk-Sharing Arrangements Involving Regulated Firms," California Institute of Technology, Social Science Working Paper No. 175; forthcoming, American Economic Review.

based on structures and procedures, have yielded important advances in understanding utility performance.

2. The effects of hospital regulation. My concern about the continuing expansion of regulation in the hospital sector as a means of dealing with rising hospital expenditures has already been mentioned. The definition of regulation that was proposed in that paper was then used to argue that the hospital industry is especially unsuited for traditional regulation, whether economic or technical, because of the number and heterogeneity of firms in the industry and of the products, and because of the fuzzy nature of performance measures.³ The explanation offered therein for the ineffectiveness

³Enthoven and Noll, pp. 217-20.

of regulation as a means for dealing with rising medical care costs does not depend on a "capture" argument, and indeed goes beyond it. Hospitals for the most part perceive effective entry controls as in their interests. They also want to make regulation work to control costs by preventing service competition that erodes the gains of

rising prices. Medical care providers generally want to preserve the third-party, fee-for-service system, and they want to use regulation to control costs so that the present system will not be dismantled by the political system, which is growing ever more weary of footing the bill.

Certificate of need regulation is already working well to prevent the entry of new hospitals; more regulation is not necessary to optimize the position of incumbent hospitals. But hospitals realize that the political price for certificate of need--that it control costs--is not being paid because hospitals have far more options than capacity expansion as mechanisms for nonprice competition. More extensive regulation illustrates the tar-baby effect. And, for structural and procedural reasons, more regulation will not succeed in achieving the purposes hospitals hope that it will serve.

3. The consequences of safety regulation. Certainly no one has yet seriously claimed that safety regulatory agencies, like the Consumer Product Safety Commission (CPSC) or the Occupational Safety and Health Administration (OSHA), are examples of industry cartelization. Indeed, OSHA and the Environmental Protection Agency (EPA) probably lead the business community's enemies list. Yet the structures cause some interesting examples of "capture" in particular cases, and in any case make the policy more costly than even its proponents prefer. Examples include the reliance of the Consumer Product Safety Commission on the "offeror" process, whereby the CPSC must let others write their standards if a competent party volunteers, and the generally anti-competitive consequences of relying more on standards than information

requirements or incentives.[/]

[/]See Nina W. Cornell, Roger Noll and Barry Weingast, "Safety Regulation," in Owen and Schultze, Setting National Priorities: The Next Ten Years (Washington, D.C.: The Brookings Institution, 1969), esp. pp. 489-95.

The three preceding examples illustrate the relationship between structure and outcomes in regulation. The second useful aspect of the two-dimensional conceptualization of regulation is that it parallels some new theoretical developments about the reasons for the formation of regulatory agencies. In his recent revision of his classic treatise on American government, Theodore Lowi has reinterpreted his ideas in terms of a new overriding principle of government--that one of its primary functions is to protect people from uncertainty.[/] As

[/]Theodore J. Lowi, The End of Liberalism: The Second Republic of the United States, 2nd ed. (New York: Norton, 1969).

Lowi was writing his revision, Bruce Owen and Ronald Braeutigam were constructing a theory of regulation based on essentially this premise. In the Owen-Braeutigam world, the purpose of regulation is, in part, to slow change and make it less abrupt. Voters are willing to pay some price in terms of market inefficiency and excess producer profits in order to buy this stability.

The two major conclusions can be briefly summarized. First, a major effect of the administrative or regulatory process is to attenuate the rate at which market and technological forces impose changes on individual economic agents; it is rational for voters to prefer such a mechanism for avoiding risk to a laissez-faire market system, even at the cost of some efficiency loss. The administrative process is "fairer" than the ungoverned market because it imposes due process requirements on any change in the existing set of goods, prices, and market structures. The result is to give individuals and firms some legal rights to the status quo. The second point is that regulated firms and industries operate within the administrative process just as they operate in the market; the environment provides opportunities for strategic behavior in pursuit of economic objectives.

. . .

The idea put forward here is simple. The courts and Congress have collaborated in constructing a law of administrative procedure that has certain economic implications. Congress has simultaneously expanded the range of economic decisions that are subjected to the forms of this process. We should therefore be willing to accept the implication that Congress (and voters) intend this result. Examining the nature of the result gives insight into the objectives sought. The objective is economic justice or fairness. This is quite explicit; this is what law is all about. There are two features of the administrative process that are of interest. The first is delay. The second

is derivative: the grant to individuals and their interest groups of equity rights in the status quo.

. . .

Legislators and successive democratically elected administrations, reacting to the preferences of voters, or median voters, have been steadily replacing markets with courts. We can reject the notion that this is done because markets are inefficient compared to fiat allocation. The regulatory agencies are almost never told what sort of allocational criteria they are to use. Legislators, and therefore presumably median voters, are concerned that the process of resource allocation be fair, and are apparently prepared to accept the outcome so long as the procedure is fair. From this, it is possible to infer that people dislike the very process of free market allocation, no doubt because its outcome is regarded as risky and therefore unfair. Alternatively, we might say that voters prefer a system that provides some leverage when the market confronts them with an economic loss, particularly one that is unexpected. This is hardly inconsistent with producers' demands for cartel management, and it explains why the political system does not react favorably to the economist's calls for deregulation.

. . .

Future research that is aimed at normative conclusions must consider, first, whether the administrative process does provide people with a means of avoiding risk in the market system, and second, whether it does so at acceptable cost or whether it is

superior to alternative means of achieving economic security and justice. We do not know the answers to these questions. Nevertheless, we are reminded of Edward Gibbon's comments on the fall of Athenian democracy: "In the end they valued security more than they valued freedom, and they lost both."¹

¹ Bruce Owen and Ronald Braeutigam, The Regulation Game: Strategic Use of the Administrative Process (Philadelphia: Ballinger, 1978), pp. 1-36.

other and with policymakers. One advantage of letting regulation be a joskow is that it comes closest to comporting with the notion of regulation that is held by others.

CONCLUSIONS

In the end, definitional issues are subsidiary to something more fundamental. Indeed, if taken too seriously, they can be diverting from the essential point behind the search for careful definitions. Obviously, the two-dimensional definition of regulation need not be accepted; we could all agree to call the same category something else. For example, we could borrow from the physicists and start naming things after our own, perhaps calling the global, functionalist definition a "stigler," the procedural subcategory could be a "joskow," and the dead-weight loss associated with the tax-transfer system of a joskow might be measured in posners. In any case, the point is that a joskow is a useful unit of analysis for theorizing and for guiding empirical studies of the effects of one particular type of stigler. Moreover, if scholars adopt consistent definitions, it will improve our ability to communicate with each