

---

ADMINISTRATIVE REGULATION AND INDUSTRY:

A SOCIOLOGICAL PERSPECTIVE

James B. Lowenthal, Michael A. Berger,  
and Mayer N. Zald

March, 1979

---

CRSO Working Paper No. 199

Copies available through:  
Center for Research on  
Social Organization  
University of Michigan  
330 Packard Street  
Ann Arbor, Michigan 48109

ADMINISTRATIVE REGULATION AND INDUSTRY:

A Sociological Perspective

James B. Lowenthal, Michael A. Berger, and

Mayer N. Zald<sup>1</sup>

March, 1979

ABSTRACT

Extending and integrating earlier explanations of regulation, the authors develop a sociological perspective of administrative regulation. Their view includes an analysis of the structural context in which regulation takes place and the interaction which characterizes the social control process. To apply their framework, the authors compare the regulation of insurance and boiler industries in the state of Tennessee. The framework is shown to have utility for understanding the complexities and anomalies of regulation in a modern democratic society.

<sup>1</sup>James B. Lowenthal is a management consultant specializing in the problems of human resource development. Michael A. Berger is an Assistant Professor of Education at Peabody College in Nashville, Tennessee. Mayer N. Zald is a Professor of Sociology and Social Work at the University of Michigan, Ann Arbor, Michigan.

ACKNOWLEDGEMENTS

Several sources of support helped this research effort to completion. We would like to express our appreciation to the members of the Tennessee Division of Insurance and the Tennessee Division of Boiler Inspection for their time and cooperation. In the case of the Insurance Division, Director Roy Bess was especially helpful. In the Division of Boiler Inspection, Director Charles Allison was particularly cooperative. We are grateful to both men and their staffs for their insights and perceptions.

Rose Siri of the staff of the Center for Research on Social Organization at the University of Michigan did her usual excellent job of typing the manuscript.

Finally, we would like to thank the Vanderbilt University Research Council for its financial support of this inquiry.

TABLE OF CONTENTS

ABSTRACT . . . . . 1

ACKNOWLEDGEMENTS . . . . . 11

CHAPTER

I. SOCIAL SCIENCE AND ADMINISTRATIVE REGULATION . . . . . 1

    Bringing the Sociologist In . . . . . 1

    Context of Regulation in a Modern Democratic Society . . . . . 6

    The Many Faces of Scholarship . . . . . 13

    The Legal Profession and Regulation . . . . . 20

II. FRAMEWORK FOR THE ANALYSIS OF REGULATORY SETTINGS . . . . . 26

    Regulation as a Special Case of Social Control . . . . . 26

    Mapping the Regulatory Environment . . . . . 33

        Contextual Elements . . . . . 34

        Intentional (or Formal) Elements . . . . . 36

        Informal Control Agents . . . . . 38

    The Analytic Dimensions of Regulation . . . . . 45

        Social Organization . . . . . 48

        Norms . . . . . 52

        Performance Curves . . . . . 57

        Control Agents . . . . . 59

        Surveillance Capacity . . . . . 61

        Sanctions and Incentives . . . . . 63

        Compliance Readiness . . . . . 66

III. INTRA-INDUSTRY REGULATION: THE TENNESSEE DIVISION OF INSURANCE . 71

    A Primer to Insurance Regulation . . . . . 71

    A Structural Map of Tennessee Insurance Regulation . . . . . 75

        Contextual Elements . . . . . 77

        Intentional Elements . . . . . 79

Informal Control Agents . . . . . 82

The Analytic Framework and Tennessee Insurance Regulation . . . . . 88

Social Organization . . . . . 89

Norms . . . . . 91

Performance Curves . . . . . 93

Control Agents . . . . . 95

Surveillance Capacity . . . . . 98

Sanctions and Incentives . . . . . 101

Compliance Readiness . . . . . 103

IV. CROSS-INDUSTRY REGULATION:  
THE TENNESSEE DIVISION OF BOILER INSPECTION . . . . . 106

A Primer to Boiler Inspection . . . . . 106

A Structural Map of Tennessee Boiler Inspection . . . . . 111

Contextual Elements . . . . . 111

Intentional Elements . . . . . 113

Informal Control Agents . . . . . 117

The Analytic Framework and Tennessee Boiler Inspection . . . . . 118

Social Organization . . . . . 119

Norms . . . . . 121

Performance Curves . . . . . 124

Control Agents . . . . . 125

Surveillance Capacity . . . . . 127

Sanctions and Incentives . . . . . 128

Compliance Readiness . . . . . 129

V. TOWARDS AN INTEGRATED PERSPECTIVE OF REGULATION . . . . . 132

Summary of the Case Studies . . . . . 132

A Complex Organization Model of Regulation . . . . . 135

FIGURE ONE: SIMILARITIES AND CONTRASTS IN CASE STUDIES . . . . . 139

REFERENCES . . . . . 140

CHAPTER I

SOCIAL SCIENCE AND ADMINISTRATIVE REGULATION

Few would deny that governmental regulation is one of the salient features of modern society. And a large amount of scholarly effort has been expended in understanding the causes and consequences of regulation. Yet, as this effort has unfolded, some noticeable biases in the literature have emerged. For one, there has been a massive preoccupation with the most visible agents of regulation -- the independent federal regulatory agencies, such as the Federal Trade Commission, the Federal Drug Administration, the Inter-State Commerce Commission, the Federal Communication Commission, and the like -- while regulation by state and local agencies and by executive departments have been largely ignored.

Another bias is in the framework and discipline that have been involved. Because they are governmental agencies, they were first seen as largely the province of political scientists, historians, and legal scholars. Later economists began to study them largely to measure their distorting impact on market phenomena. Sociologists ignored them entirely.

This essay begins to correct both of these problems. We attempt to show how a sociological framework might add to our understanding of regulation. We do so by using the framework to study two state regulatory agencies: the Tennessee Insurance Department and the Tennessee Division of Boiler Inspection.

Bringing the Sociologist In

The various social science disciplines have contributed much to our understanding of government regulation. Political science, for example, has evaluated the types of policy outputs, the factors which affect these outputs, and the presence of important interest groups. Economics, by the

same token, has shown how the "natural" forces of supply and demand must be modified, at times, by government regulation to produce a more efficient allocation of resources, how regulation relates to price and entry, and what the various effects of regulation really are. Finally, the organization behavior literature has sensitized us to the likelihood of goal displacement in an agency and the internal and external variables which may explain its occurrence.

Taken individually, the various disciplines provide a partial picture of regulation. But in the real world, things are not so simple. For when we analyze the various disciplines collectively, as we attempt to do in the third section of this chapter, dozens of variables are seen to affect the regulatory process and flow from it. If a more realistic picture of administrative regulation were to be painted, many of these variables should also appear on the canvas. How do scholars deal with this empirical complexity? Or do they?

Generally, scholars deal with the complexity by assuming that some variables do not change, that is, they treat certain variables as "givens." With this solution, however, the analysis of regulatory behavior faces a dilemma: should the researcher create a theoretically simple model of regulation and thereby omit a whole host of other potentially relevant variables, or should the researcher account for the complexity implied in the various perspectives discussed above and thereby sacrifice any hope of theoretical parsimony?

It would appear that there is no way out of this dilemma. Economists, for example, tend to avoid the inclusion of non-economic variables, while political scientists, who limit their focus to legislative or agency behavior, tend to omit the relevance of economic determinants. But before any resolution of the simplicity-complexity dilemma is achieved, the notice-

able absence of sociological variables must be noted and corrected. It is indeed astonishing that sociology has not placed administrative regulation squarely on its research agenda (but see Wiley and Zald, 1968; Zald and Hair, 1972; Pfeffer, 1974; and Zald, 1978).

The potential of sociology for describing and explaining regulation is formidable. Although space does not permit a full exposition of the breadth of sociological issues which might bear on the topic, four issues will be discussed, albeit briefly: institutions and the social structure, the ecological perspective, power, and authority.

While political scientists concentrate on political institutions and economists study economic institutions, sociologists broaden their focus to include the relationship between all institutions in society. Institutions are defined as the relatively stable, widely-accepted roles, norms (rules), and values that develop around the basic needs of a society. Defined in this way, the classic institutions are the family, religion, political, educational, and economic systems. More recently, however, Zald (1978) has argued for a broadening of the concept to include any element which satisfies a basic societal need. Thus, regulation, in his view, can be conceived as an institution, in that it serves the regulatory needs of an advanced industrial society.

The importance of the study of institutions lies not only in the analysis of their position in the social structure, but also in the study of the way in which they become embedded in society (the process often called institutionalization). Sociologists have been historically interested in the way in which institutions come to terms with their environment, take on a life of their own, and become infused with values (Selznick, 1949).

The second issue is the ecological perspective. Originally derived from the greek word oikos, meaning living space, the term ecology to the

sociologist has come to mean the responses made by populations to environmental conditions in the course of satisfying their subsistence needs. The central premise of the ecological perspective is that population, environment, and social organization are interdependent variables.

The importance of the perspective for the study of economic regulation lies in the underlying problem it poses for investigation and theoretical debate. The underlying problem for human ecologists is the adaptation that a social organization makes to maintain itself within the limits imposed by its external environment. Stripped of its technical language, the human ecologist is interested in the way a regulatory agency adapts, or is shaped by, the constraints of its regulatory environment.

Various theories have been suggested in the analysis of this problem. The classic Chicago school, for example, explained social organization as a result of "natural" processes such as economic competition or the division of labor (Park, 1936). A second school, which developed out of criticism of the first, was called the sociocultural or value-orientation approach (Firey, 1945). It emphasized the importance of values and norms in determining the nature of social organization. Most recently, however, a third school, called organizational ecology, has focused on four categories of variables: population, organization, environment, and technology (Duncan and Schnore, 1959). The importance of this theoretical debate for economic regulation is not so much in the substance of its arguments, although the variables prove useful later, but rather in the inherent analysis of the conditions, consequences, and reciprocal relationships between a social organization and its constraining ecological environment.

The third sociological issue to be highlighted here is power. Max Weber defined political power as the ability to realize one's own will even against the resistance of others (Weber, 1947). One of the major questions

of sociology has been "Who exercises power in society?"

Regulatory agencies are part of the administrative apparatus of the state; they are backed by its coercive powers. On the surface they would be well suited to control the industries they oversee. Yet the history of regulation is at least partly the history of the ability of industry elements to evade that power. The long debate about who rules society, about the nature of elites, veto groups, or class domination are central to the understanding of the place and effectiveness of regulatory agencies in American society.

The final issue concerns the notion of authority. Authority is that form of power which people consider right and legitimate. Weber (1947) identified three types of authority: (1) traditional authority, which derives from sacred traditions of loyalty to the king or chieftain, (2) charismatic authority, which obtains from the emotional attachment the followers have for the leader by virtue of the leader's exceptional personal qualities, and (3) legal/rational authority which derives from a system of explicit rules vested in the office, not tradition or the person. Weber would suggest to us, therefore, that the bureaucracy of regulation falls into the legal-rational authority type.

Weber asserted that the state was the one organization in society that successfully claims the authority to use physical force. To maintain its legitimacy, however, most of the states rely on the legal system to support their authority. While the official purpose of the legal institution is to define and suppress deviance, protect individual rights, and settle disputes, in practice the law may also give certain groups arbitrary benefits, deprive other groups of their rights, and be an effective tool of harassment. As we will see below, this position is explicit in the capture theory of regulation.

With some issues in sociology identified as relevant to the study of regulation, it would seem we have compounded the simplicity-complexity dilemma rather than resolving it. However, instead of choosing between simplicity or complexity, a sociological perspective may provide several benefits. First, it may be a way to integrate the various disciplines into a more comprehensive framework. Second, sociology could show the interconnections between the different variables in a way that neither discipline could do individually (Zald, 1978). Finally, with sociology's appreciation of institutionalization ecology, power, and authority, sociology could shed new light on the process of regulation in an advanced industrial society.

The purpose of this essay is to offer an integrated approach to regulation. Grounded in a sociological perspective, the essay attempts to embrace new elements of the regulatory phenomenon. To accomplish this goal, the essay begins by specifying the context of regulation. Then the discussion reviews the current theoretical explanations. In the second chapter, the essay details the beginnings of a sociological view which, in turn, leads to a description of structural and process variables. To apply the perspective, the third and fourth chapters evaluate two state regulatory agencies: the Tennessee Insurance Department and the Tennessee Division of Boiler Inspection. The fifth chapter then concludes the discussion with a comparison of the two case studies and some theoretical implications.

#### Context of Regulation in a Modern Democratic Society

During the past century, economic regulation is a term with which every American businessman has become uncomfortably familiar. Prior to 1887, there was little direct regulation of economic activities by the federal government. The activities of business firms were, for the most part, free from influence external to the dynamics of the market mechanism. What few constraints existed were imposed by the individual states and were limited mainly to

licensing and taxing purposes. States were concerned more with the form and fiscal structure of economic enterprises rather than the particular procedures utilized by these firms to promote their competitive interests.

After 1887, however, the Federal government has played an increasingly important role in the regulation of economic activity. In 1887, Congress created the Interstate Commerce Commission to regulate trade between states. Over the next 40 years, Congress created five other major independent regulatory commissions,<sup>1</sup> all modeled somewhat after the ICC.<sup>2</sup> The scope and pervasiveness of regulatory agencies comprised what Anderson (1962) has termed the "regulatory state." According to Anderson, the emergence of the regulatory state was completed by 1917, and the framework for a permanent role of government in economic decision-making was inescapably established.

This section addresses the importance which regulation has come to have in all aspects of national life, social as well as economic. The increasing frequency with which regulatory bodies are created and interweave in public and private life has definite implications for a nation firmly committed to democratic ideals and the principles of free competition. Regulation as a phenomenon poses critical and urgent dilemmas for a democratic society, the resolution of which may be crucial for the preservation of that form of society. This section describes briefly the nature of regulation, the rationale for its existence, the criticisms which it has received -- and they have been many -- and the issues which must be addressed by all those concerned with regulation in a democratic society. The objective of the material included in this section is to provide the reader with a context for

<sup>1</sup>The FCC, FPC, SEC, CAB, FTC.

<sup>2</sup>See Schwartz (1973) and Anderson (1962) for comprehensive histories of the major regulatory agencies.

understanding and hopefully appreciating the approach which the authors have undertaken for studying this phenomenon.

There can be little doubt that regulatory activity is increasing in the United States and that it is encompassing wider areas of economic and social activity than ever before. Mark Massel, a senior staff member of the Brookings Institution, observed over fifteen years ago that

the regulatory process is fast becoming an ubiquitous element in national life. All signs point to further increases in government activity. The combined influences of regulation and direct government operations affect all phases of economic and social endeavor (Massel, 1961: p. 202).

President Ford's Secretary of Labor, John Dunlop, attested to the accuracy of Massel's foresight in reviewing the activities of his own department. Dunlop recounted that the Department of Labor administered only eighteen regulatory programs in 1940, 40 in 1960, but that the number had mushroomed in 1975 to 134 (Dunlop, 1976).

Although regulation is often associated with economic activity (the efficient operation of railroads and airlines, the prevention of unfair monopoly and cartelization, product quality, the manufacture and distribution of energy, the functioning of capital markets, etc.), regulation has also become an inherent characteristic of many realms of social activity. According to Daniel Bell (1971), this shift in regulatory attention is a reflection of a basic change in societal processes from an "economizing" mode to a "sociologizing" mode, or from market to nonmarket decision-making. Concern for the quality of the environment (EPA), the nature of the workplace (OSHA), the nutritional status of the population (FDA) are a few areas which have become primary objectives of regulatory bodies.<sup>1</sup>

---

<sup>1</sup>A major impact of sociologizing decision-making is, of course, economic despite a dominant shift in focus. Pollution-control devices, such as catalytic converters, inevitably increase the cost of many goods to the consumer.

The basic dilemma, of course, which all of this regulatory activity poses, is the degree of external intervention in private affairs required to preserve the freedom from constraint and surveillance enjoyed by citizens of a democratic society. Before attempting to clarify this issue, which in reality is much more complex than the simple statement of it above, both a more precise definition of regulation and also the implications of this definition for the analysis of regulatory behavior must be presented.

The impetus for this study derives from the authors' interest in the social control of institutions. In order to sharpen the analysis, this study focuses primarily on the subset of processes and actors involved in the ultimate control of the behavior of any one institution or set of institutions<sup>1</sup> known as administrative regulation. Administrative regulation involves the delegation of formal authority by the executive or legislative branch of a political entity (at the federal, state, or local level) to a formal organization for the explicit purpose of assuring that certain standards of performance are adhered to by institutions operating within the particular mandate delegated.

This focus does not mean that other forms of regulation will be systematically excluded from the analysis. On the contrary, it is the contention of the authors that focusing only on the formally-identified mechanisms of regulation is inadequate for a comprehensive and accurate understanding of the process of regulation. Some narrowing, nevertheless, was believed necessary in order to achieve a degree of depth in the analysis and to avoid the superficiality of many previous inquiries in this area. This distinction between administrative regulation and process of social control will become clearer in the following sections.

---

<sup>1</sup>For the purposes of this analysis, institutions performing similar functions will be referred to as industries, e.g., the leisure industry or the transportation industry.



One question which hasn't yet been addressed, but which is fundamental for understanding the nature of this inquiry, is the impulse for the development of the regulatory state in a capitalist society.<sup>1</sup> Under ideal circumstances, classical economic theory formulated initially by Adam Smith would be sufficient to explain the efficient operation of free market exchange. The "invisible hand" referred to technically as the price system, would automatically adjust shifts in supply and demand to each other in order to "magically" clear the market. Under conditions of modernization and rapid industrialization, however, the invisible hand was insufficient to insure efficient market behavior in a consistent manner to all segments of the economy.

Anderson (1962) identified two perspectives which conditioned the rise of regulation in America. On the one hand, a material environment existed characterized by an expanding industrial and urbanizing setting. This material perspective was combined with an ideological environment characterized by a progressive, pragmatic, moderate, and collective outlook seen by its advocates as a response to the inadequacies of unregulated economic activity.

The primary arguments presented for creating independent regulatory commissions included:

1. providing support for an overburdened legislature;
2. removing regulation from the political arena;
3. applying a more scientific approach to economic activity;
4. combining executive, legislative, and judicial functions for the specific purpose of regulation; and
5. protecting the interests of the weak and poor.

<sup>1</sup> The regulation of economic activity has arisen, of course, in non-capitalistic settings, but the problem of developing regulatory philosophies and mechanisms in capitalistic, laissez-faire states has been especially acute.

It was hoped that the regulatory commissions, theoretically isolated from the mainstream of political influence and ideally structured for their task, would be able to prevent unresponsive behavior of large corporate organizations. A secondary objective which regulation attempted to address was the promotion of industrial development in areas whose growth and viability were threatened by excessive, unrestrained competition. An argument advanced by industry claimed that investing large funds into new product and process development often served as a disincentive to the innovating firm, if the innovation could be easily reproduced and cheaply marketed by competing firms.

In either case, public interest or industrial promotion regulators have not fared well at the hands of their critics, and demands for reform have resulted in at least five major restructuring efforts in the last 30 years.<sup>1</sup> On the one hand, most representatives of private enterprise view regulation as a barrier to more effective economic operation.<sup>2</sup> On the other hand, representatives of the public interest -- however vaguely defined -- claim that regulators are nothing more than pawns of the industries they are responsible for regulating.

Despite the pervasive evidence presented by both sides in support of their respective claims, it is apparent that there are no easy right or wrong answers for society. For example, does a society struggling with the adverse effects of inflation demand more expensively designed cars (equipped with air bags and emission control devices) or focus on the quality of the environment and high standards of automotive safety for consumers? Does society encourage the development of alternative energy sources with windfall

<sup>1</sup> President's Commission on Administrative Management or Brown Law Committee (1937), First Hoover Commission (1949), Second Hoover Commission (1955), Landis Report (1960), and Ash Council (1971).

<sup>2</sup> See studies which attempt to demonstrate that performance is more effective in unregulated as compared with regulated industries (Jordon, 1972).

profits and monopoly market positions or attempt to lower prices with increased competition and smaller operating units?

The choices faced by society with regard to the type, nature, and extent of regulation clearly involve complex issues and, at the same time, demand urgent responses. Failure to grapple successfully with the issues and to evolve adequate solutions can have irrevocable consequences for the citizens of a democratic society. Massel pointed out quite succinctly the dilemma which increasing regulation poses:

Our natural tradition points to a minimum of government interference, yet we look to government solutions for the many new problems that stem from the additional complications of economic activity, greater sectional inter-dependence, striking technological changes and an uncertain international situation (Massel, 1961, p. 202).

The experience of rapid technological change and increasing socio-economic inter-dependence conclusively demonstrate the necessity of some form of regulation. The ideal of a regulation-free society functioning efficiently to promote the interests of all segments and groups in an illusion which should probably be deleted from the national ideology. Regulation is a reality, but such a reality does not necessarily imply the end or disintegration of a democratic society. The co-existence of democracy and regulation means that the mechanisms, processes, and effects of regulation must be better understood than they are presently. Before proceeding to demonstrate the utility of a sociological approach for an improved understanding, however, it is important to place it in context of theories already formulated to explain the regulatory process. The section which follows reviews theories of regulation developed primarily by economists, political scientists, and legal analysts and concludes by justifying the need for a sociological approach to the theory of regulation.

#### The Many Faces of Scholarship

Over the past four decades, the subject of economic regulation by state and federal commissions has undergone several reinterpretations. Although the discussion is far from complete, theories and studies from various disciplines -- history, economics, law, and political science -- have contributed their unique perspective to explain both the determinants and effects of regulatory behavior. In so doing, they have begun to question not only the traditional views of business-government relations, but also the very wisdom and effectiveness of any planned attempt to manage the marketplace.

We should hasten to add, however, that the analysis of regulatory behavior presents a dilemma. For example, the scope of regulatory behavior is an illusive concept; every kind of economic activity is regulated to some extent. The question for the researcher is whether regulation should be viewed to include structurally different (e.g., independent commissions or commissionless governmental agencies) institutions which play functionally similar roles or should it include intra-agency machinery such as cartels, trade associations, rate bureaus, and/or price leadership systems. This essay will focus on the commission aspects of regulation, although it recognizes the importance of other regulatory mechanisms. The discussion begins with the two widely known images of regulation: the public interest notion and the capture thesis. Since scholars who analyze the regulatory process seem to converge on these two themes, it seems necessary to explicate them first. Then the paper will move to a review of historians and regulation, economists and regulation, the legal profession and regulation, political science and regulation, three combined approaches, and a section on conclusions.

There have been, in general, two main theories on the determinants of regulation. According to the first, regulation results when legislators,

confronted by a broad social movement or energized by a dramatic crisis, enact laws designed to prevent a firm or industry from carrying on a certain practice (Wilson, 1974). This is the "public interest" theory of regulation. For example, in the nineteenth century, "public enterprises" had service functions, such as banking, transportation, and industries later called "public utilities." Some of these enterprises combined great economic power with the tendency toward corruption which required regulation for the protection of potential victims. In addition, industries such as railroads evolved into natural monopolies thereby losing the discipline of free market forces. In modern times, industries such as broadcasting and air transportation appeared to need regulation to prevent chaotic and destabilizing effects of competition which seemed destined to injure both the industry and the public alike.

Although the reasons advanced regarding the need for regulation varied by industry, the notion of the "public interest" served as the ideological glue to justify the actions of legislators, presidents, judicial bodies, and commissioners. In the 1930s, the doctrine reached new heights in its usage. Legislative draftsmen inserted the phrase repeatedly in a flood of regulatory law that created the Federal Communications Commission, the Securities and Exchange Commission, and the Civil Aeronautics Authority (now Board).

The New Deal also produced the main theoretical exposition on administrative regulation written by James M. Landis. In his Storrs Lectures at Yale, published as The Administrative Process (1938), Landis recognized the ambiguity of the term "public interest" but nevertheless celebrated its validity and basis for wide administrative discretion. At the heart of his thesis was the argument that:

. . . when government concerns itself with the stability of an industry it is only intelligent realism for it to follow the industrial rather than the political analogue . . . The dominant theme in the administrative structure is thus deter-

mined not primarily by political conceptualism but rather by concern for an industry whose economic health has become a responsibility of government (Landis, 1938: 10-11).

Landis devoted much of his discussion to a defense of regulation, for the "public interest" notion was facing increased critical attack. Derived from various sources, the alternative view of regulation argued that regulation results when an industry successfully uses its political influence to obtain legal protection for itself or to impose legal burdens on its rivals (Wilson, 1974).

Early skeptics questioned just how independent the regulatory machinery was likely to be or should be. For one thing, the appointment of expert, non-partisan regulators seemed a step toward elitism and away from the nation's democratic ideals. At the same time, genuine independence was considered an illusory phenomenon as presidents or state officials proliferated the agencies with party cronies and hacks. In 1925, for example, President Calvin Coolidge crystallized the "capture" theme by appointing anti-progressive William E. Humphrey to the FTC. Humphrey's appointment, and the new 3-2 majority for anti-progressives, was interpreted as a drastic step against the public interest and subsequently brought loud protests and calls for FTC abolition (Davis, 1962).

Though Landis attempted to quiet the criticisms which described regulatory agencies as the unresponsive "fourth branch of government," the capture idea persisted. Over the next several decades, observers noted that the CAB and the FCC seemed to equate "public interest" policies with the policy recommendations of the most powerful interests of the airline and communications industries. By the 1950s, scholars such as Jaffe (1954) and Huntington (1952) analyzed the ties between regulator and regulated and apparent weaknesses in regulatory thought. In 1955, Marver Bernstein published his life-cycle theory of regulation that brought together the diverse objections of the New Deal era, and in 1960 James Landis reversed his

earlier position by documenting the breakdown of the regulatory system he advocated 22 years before. In the late 1960s, the assumption was that commissions, like so many other American institutions, had sold out. Incisive exposes by Ralph Nader and his "raiders" led to equally damning though less sensational studies by journalists and scholars that suggested earlier results had merit. By the 1970s, the "public interest" theory had few defenders.

The capture theme, however, does not enjoy complete scholarly consensus. Posner (1974) argues that "capture" has little explanatory power. He favors instead an economic theory of regulation based on the benefits and costs of the coercive power of the government and the theory of cartels to explain why the industry will control the regulator. Baldwin (1975) sees regulatory behavior as a rational act by government to insure its own survival. He contends that regulatory agents function as arbitrators in economic disputes. Accordingly, he asserts that regulatory officials attempt to survive by creating compromises (and making policy side-payments) which are acceptable to all parties. Jaffe (1970) argues that capture is a gross exaggeration based on the devil theory. While Jaffe acknowledges that cooptation does take place, he contends that capture is a loaded term that should be replaced by cooperation which symbolizes the actual symbiosis between regulator and regulated.

Finally, Grafton (1975) explains the creation and behavior of federal agencies as a result of a sudden shift in social, economic, or technological change (called SET novelty) which, in turn, leads to a process wherein interest groups and the government attempt to understand a novelty's implications, modify the novelty to fit socioeconomic and political systems, and adjust the socioeconomic and political system to fit the novelty. In Grafton's view, influence on governmental regulatory bodies stems not only from economic forces, but also from a wide variety of groups which are faced

with a "novelty" (e.g., labor unions, atomic energy, pollution) and attempt to fit it into the mainstream of social and economic life. We turn now to a brief discussion of the contributions of the various social science disciplines.

Gabriel Kolko led the crest of the capture thesis in each of his two books on regulation, The Triumph of Conservatism (1963) and Railroads and Regulation (1965). Kolko pointed out that railroad men themselves were important advocates of federal regulation. He argued that "Federal economic regulation was generally designed by the regulated interest to meet its own end, and not those of the public or commonweal" (Kolko, 1965: 3). While many of Kolko's ideas were not embraced by his colleagues (see Otis L. Graham, Jr., ed., From Roosevelt to Roosevelt: American Politics and Diplomacy, New York: 1971), his conception of capture at the outset of regulation and the inevitability of commission behavior, given the American political economy model, appealed to the "Chicago school" of free market economists (see George Stigler, 1971; Thomas Moore, 1972; and George Hilton, 1966).

While some historians became enamored with the capture theme, James Q. Wilson (1971) asked how the ICC could simultaneously be the captive of railroad, truck, and barge transporters, when these carriers had overlapping markets. Paul W. MacAvoy (1971) asked in what sense the FPC was the captive of the natural gas industry when field prices were regulated so strictly that production led to what was termed "regulation-induced shortages."

Most of the studies conducted by historians seemed to pertain to railroad regulation. Lee Benson (1955), for example, portrayed the origin of the ICC as a story of warring interest groups. Informed by pluralists' political science theory, he demonstrated the inadequacy of both "public interest" and "capture" as models of the origin of national railroad regulation. Studies by Nash (1957), Purcell (1967), and Kerr (1968) followed

the pluralist conceptions in Benson's book. The same points were made in Albro Martin's (1971) analysis. He contended that the ICC's regulatory action induced capital starvation that eventually initiated a decline of the American railroad system. Martin argues for a reversal of Kolko's capture hypothesis contending that where it did occur, it was capture of the railroads by the ICC, not the other way around.

Two studies evaluated railroad regulation at the state level. George H. Miller (1971) confirmed the group-struggle pattern of regulation bringing the public interest notion into sharper focus. Miller pointed out that the so-called "Granger" legislation of the 1870s was not so much agrarian as geared to prevent railroads from refusing to extend their services. As for capture, it was not a factor in Granger states, he contended, for the railroads fought the commission with every tool imaginable. Stanley Caine (1970) refuted Governor LaFollette's contention of progressive legislation in the public interest and instead argued that it set up the commission as an appeal body that would accommodate the railroads and betray the "public interest."

We found two studies, however, which did not pertain to railroads. Davis (1962) studied the transformation of the FTC and found the same alternation between public interest and capture as in previous railroad studies. The oscillation, he notes, depended on the identity of the commissioners which varied with the president and eventually the mood of the nation. Michael Parrish (1970) noted the effects of concentrated industry pressure on the shape of legislation and the SEC, which suggested to him that the same characteristics of capture which Kolko had noted in The Triumph of Conservatism and Railroads and Regulation could be applied to the SEC by merely substituting business for railroads.

In short, historical writings on regulation seem to be equivocal. While demonstrating the inadequacy of either public interest or capture models, historians have tended to emphasize pluralist struggles for regulatory

machinery that may or may not involve the public interest as a tactical weapon.

Where historical scholars focused on the causes, mandate, and behavior of regulation, economists have been interested in its impact. Early studies followed the institutional school, yet it wasn't until the 1960s and 1970s and the revival of price theory that economists emerged to provide a quantitative evaluation of regulation's effect. One influential hypothesis claimed that regulation had no effect at all (Stigler and Friedland, 1962). In contrast, a pathbreaking article contended that the profit maximizing firm will over-capitalize, while the sales-maximizing firm will have an incentive to under-capitalize when regulated to earn no more than some fixed proportion of its capital. Known as the excessive-capitalization theory, this article encouraged a host of spin-off studies (see Bailey and Malone, 1970; Baumol and Klevorick, 1970; Bailey and Coleman, 1971; Klevorick, 1973; and Hendricks, 1975) and immortalized its founders by using their names to describe the phenomenon they articulated: "the Averch-Johnson effect" (1962).

A few economists theorized about the entire regulatory process. George Stigler (1971) attempted to update Kolko's capture thesis by arguing that wherever capture had occurred it was not so much a result of commission behavior as it was of prior political power expressing itself in the creation of an agency. Olson (1965) described the free-rider problem in large groups where all members have a common interest in obtaining the collective good but no common interest in paying for it. Analyzing cartelization in the property liability insurance industry, Joskow (1973) concluded that rate-making in concert, combined with prior approval laws, discouraged price competition. He argued that rating bureaus, with the help of regulation, maintain cartel control (thereby reducing possible free rider problems). Hirschman (1970) specified the market mechanisms of exit, voice, and loyalty

that facilitate recuperation in a deteriorating form. His main point was that the presence of the exit alternative for consumers tends to atrophy the development of voice and that loyalty is a force which postpones exit and activates voice thereby saving a firm from the dangers of premature exit of its customers.

The distinctive contributions of the economists are twofold. They have contributed a theoretically-based methodology that quantified regulatory inefficiencies, and they were able to predict probable effects of hypothetical changes of commission policy. On the other hand, their contribution seems to suffer from its cross-sectional focus, its lack of attention to historical sequence, and its narrow concern with primarily economic phenomena.

#### The Legal Profession and Regulation

In contrast to the historian's case analysis of determinants and the economist's quantitative testing of regulation effects, lawyers have utilized quasi-case methods to focus on due process, legitimacy, and reform. Three books on the FTC typified this tradition. First, Gerard Henderson (1924) found the early FTC actions guilty of unfairness and ready to spend its energies on cases of no broad public implications. Thomas Blaisdell (1932) argued the same points claiming the FTC had confused its means with its ends. Nelson Gaskill (1936) found the same FTC failure and announced his hope that intelligent regulation could occur despite recent failures. He saw a clear enunciation of policy by both the commission and the Congress as a viable first step to improvement. Louis Jaffe (1954) expanded the "inefficiency" theme by arguing that any dissatisfaction with regulation has occurred because of the inherent structural and political characteristics of the system. He concluded that much of what agencies do is the predictable consequence of their broad and ill-defined regulatory power.

In a series of prescriptive monographs, various authors proceeded to display faith in regulation. Henry J. Friendly (1962) showed that due process carried to its extreme could actually thwart "public interest." Yet he affirmed administrative agencies as a vital part of the structure of American government. In reality, his rejection of negative criticism and calls for abolition was anticipated in the reform-oriented works of I. Leo Sharfman (1931-37) on the ICC, E. Pendleton Herring's (1936) book on careers of federal commissioners, and Robert E. Cushman's (1941) massive study of independent regulatory commissions.

While each of the above works are important contributions, their focus on "improvement" and "prescriptions" seems to yield little analytical utility or explanation. Any theory of regulation is implied rather than explicit.

Political scientists have pursued other themes in addition to capture. For example, the premier monograph was Marver Bernstein's (1955) book, Regulating Business by Independent Commission. Surveying the field, Bernstein evaluated the arguments for and against regulation, coming down heavily on the negative side. He argued that commissions pass through a rather predictable life-cycle beginning with exuberant prosecution of its mandate and ending with ossification and debility. While Bernstein's notion of capture as a function of age fell short in documentation, it provides another explanation to capture (other than the agency selling out), and it sets the stage for reformers, such as Ralph Nader and other economists in the 1960s.

In his "Dead Hand of Regulation," James Q. Wilson (1971) argues that regulation has imposed costs without compensative benefits. After supporting the Stigler notion of capture, as evidenced by limited entry, restricted competition, and cross-subsidization, Wilson goes on to point out other regulation effects such as protection of the incompetent producer, higher prices, distortions in efficiency, informal use of discretion, confused ends

and means, and the non-regulation-orientation of commissions. Contrary to any capture theme, he concludes that regulation is an ad hoc, particularistic process, affected but not determined by a policy habit or inclination which suggests that agencies will not operate on the basis of general rules and will go to some lengths to avoid developing rules so as to (1) control uncertainty and (2) achieve a desirable state of affairs (Wilson, 1971).

Baldwin (1975) specifies Wilson's desirable state of affairs by postulating that governments create regulatory agencies to effect bargains between conflicting parties in such a way as to prevent the alienation of any group and, in turn, insure the government's re-election. Baldwin contends that, once created, independent commissions attempt to perpetuate their own existence by minimizing judicial appeal possibilities and utilizing side payments (in the form of subsidies or restriction of entry) to facilitate agreement between the conflicting parties.

The attractiveness of the studies listed above is self-evident. While they lack an explicit methodology and theoretical unity, they offer fresh alternatives to the public interest versus self-interest (capture) controversy. In addition, they lead the way to a reformulation of thought about the regulatory process. This reformulation is best exemplified by the multi-disciplinary approaches to be discussed next.

Three multi-disciplinary approaches offer fresh insights into the phenomenon under review. In his discussion of the Ash Council report, Roger Noll (1971) argues that the cause of regulation problems are at the very core of the democratic process. Refuting the errors by incompetence approach, Noll takes a political-economy perspective that contends that political behavior can be explained and predicted on the basis of the effects of changes in policy upon the distribution of wealth and income.

Since regulation deals with questions relating to the distribution of wealth and income, it is an obvious arena for political economy. More specifically, he attributes the causes of regulation failure to defective legislation, lack of indicators of commission success or failure, and over-responsiveness of commissions to their industry as a result of the commission's desire not to be overruled in an appeal.

Posner (1974) also attempts to combine economic and political theories of regulation by conceiving regulation as a service to be supplied to effective interest groups. His theory discards the untrue assumption of pristine virtue (i.e., public interest) and replaces the "capture" metaphor with supply and demand. Like political scientists, he argues that regulation serves the private interests of politically effective groups. Assuming (1) that coercive power of government can be used to confer valuable benefits or costs and (2) that theory of cartels can explain supply and demand, Posner draws attention to economic regulation as a product allocated via supply and demand to groups who value it the most and who can pay the costs of obtaining it.

Finally, Grafton (1975) explains the creation of federal agencies as a response to a sudden shift in social, economic, and/or technological change (called SET novelty). Using examples such as labor unions, the Great Depression, the discovery of atomic energy, he contends that the process is one of conceptualization of the relation between the novelty and the socio-economic political system. In the course of conceptualization, conflict, insufficient entrepreneurial development, creation of natural monopolies, use of publicly owned resources, and danger of novelty destructiveness are found to occur. He concludes that the first new agency proposal after conceptualization is a reliable guide to the organization structure and power of newly created commissions.

This section has reviewed two main theories of regulation and the major contributions of various social science disciplines. The analysis suggests at least four conclusions.

1. Neither "public interest" nor "capture" completely describes the American experience with regulation. For one thing, there is considerable evidence to indicate both explanations are valid. Secondly, notions of public interest and capture ignore other important determinants of the regulation process such as age, technological novelties, or political-economic forces. Finally, the weight of evidence from the various disciplines seems inconclusive, fragmentary, and ambiguous.

2. Each discipline has varied in its method and focus. Where historians, legal scholars, and political scientists have relied on case and quasi-case materials, economists have utilized quantitative methodologies. In terms of focus, historians and political scientists have pursued issues pertaining to regulation determinants; economists sought to explain effects; legal scholars discussed due process, legitimacy, and reform.

3. Each approach has been uni-directional. That is, each discipline has viewed regulation as either the commission regulating the industry or the industry "capturing" the agency. In either case, earlier analyses have ignored the dynamic interactive, mutually-dependent multiple forces competing in a turbulent environment (Emery and Trist, 1965).

4. There is a need for an integrated approach (Zald, 1978) which can pull together variables from the various disciplines in a way that provides a clearer and more realistic description and explanation of the regulatory process. What this review has attempted to show, in other words, is that speaking of capture is to avoid responsibility for distinguishing between regulatory failure which indeed may be brought on by the power of the regulated industry and regulatory behavior which is affected by other important determinants.

The chapter which follows attempts to respond to these conclusions by evaluating the relationship between regulation and the sociological process called social control. After discussing the general problem of regulation, the argument will be that economic regulation can be really seen as a special case of social control and thus amenable to a whole host of other concepts of a distinctly sociological flavor.



## CHAPTER II

### FRAMEWORK FOR THE ANALYSIS OF REGULATORY SETTINGS

#### Regulation as a Special Case of Social Control

Koch (1974: 340) refers to regulation as the process by which a governmental regulatory commission imposes rules, instructions, procedures, and attention on a certain market. He states that regulatory bodies often have the power to regulate virtually every type of economic variable including market entry, the price, quantity, and quality of a product, and even the right to go out of business.<sup>1</sup>

At its inception, regulation was designed to serve many purposes. In addition to the traditional economic rationales of insuring economies of scale, restraining the insurgent monopolist, preventing unfair price discrimination, and discouraging cutthroat competition, regulation has been introduced to obtain social goals such as subsidizing service to special groups (transportation), regional planning and development (power), and consumer protection against future contingent claims (insurance).

Since the creation of the Interstate Commerce Commission (ICC) in 1887, the government's regulatory apparatus systematically has injected itself into virtually every aspect of American life.<sup>2</sup> Under the present interpretation of the U.S. Constitution, an industry may be subjected to public regulation when its actions are found to be "clothed with a public interest." Moreover, the criterion is so broad that no industry is immune from regulatory control once there is a strong mandate for its regulation (Scherer, 1970).

<sup>1</sup>Material for this chapter was drawn from Berger's (1978) unpublished dissertation.

<sup>2</sup>See Weidenbaum (1975) for a discussion on the extensiveness of regulatory related expenditures and Weaver (1977) on regulatory pervasiveness.

Yet, for all its penetration into American society, regulation is a paradox. On the one hand, the growth of regulation, as an American institution, implies it serves some basic need in society. At the same time, regulation is fundamentally at variance with the basic assumptions underlying the American political system (Schuck, 1975). American society, for example, is rooted in utilitarian ideals about the relation between citizen and state. These ideals assume that voluntary transactions in the market place are beneficial to individuals (otherwise they would not engage in them) and, in turn, benefit the larger society. By specifying and limiting the terms under which these exchanges take place, regulation substitutes its judgment for the judgment of individuals and thereby threatens the very foundation of a democratic society.

In reality, this paradox becomes more understandable when one conceives regulation as an uneasy compromise between two "ideal" processes by which social organizations coordinate the economic activities of large groups. These two types are centralized planning and the free market. Centralized planning, on the one hand, refers to the allocation process whereby production and distribution decisions are made by a government unit and enforced by the direct use of coercion. The free market type, by contrast, is the coordination process which allocates economic decisions not to some central authority, but rather to the actual participants in the market place. Furthermore, rather than coercion as the basis of decision enforcement, the market techniques rests on the proposition that voluntary exchanges between informed parties can bring about a desired degree of coordination without the use of coercion. Regulation, it seems, incorporates some of the elements of both types and thus stands between them as a third allocation process.

The problem of regulation, therefore, is the presence of simultaneous forces which stand in contradiction to each other. On the one hand, the

process of regulation attempts to solve the problems of complex technologies, corporate inflexibility, and monopolistic actions by centralized planning. Yet, in the process, the government's regulatory apparatus reduces individual freedom and infringes on the very core of the free enterprise system.

The depth of this value dilemma should not be underestimated. The choice is between freedom and some degree of order. If the individual consumer and corporate entity, for example, desire maximum freedom (and hence no government intervention) the consumer must be prepared to experience monopoly sellers, dangerous foods or drugs, and insurance companies which leave their policy holders unprotected when disaster strikes. The corporate entity, by the same token, must also be ready to face price-cutting competitors, obsolete technologies, and the risk of bankruptcy. By contrast, if the individual consumer and corporate entity desire maximum order and predictability (to the extent possible), the former must be prepared to relinquish some degree of personal freedom and the latter must concede some of the ideals of the free market system.

Up until now, the discussion has focused on the problem of regulation. Explicit in the material was a brief analysis of regulation in the economic domain. It is clear, however, that the process of regulation is relevant to several levels of analysis. Children's behavior, for example, is regulated by their parents. Students are prevented from disrupting the classroom. Workers are coordinated by their managers, and society's criminals are regulated, to some extent, by societal laws and social control agents (i.e. the police). Thus, while the term economic regulation refers specifically to the relationship between a government entity and a particular industry, at a more general level, the term regulation falls under the sociological process of social control. The next section attempts to show that governmental regulation is really a special case of the process of social control and hence, particularly amenable to analysis from a sociological point of view.

The topic of social control has a long history in the field of sociology (see Janowitz, 1975 for an extensive review of this literature). Conceived largely to refute economic theories of self-interest, sociologists have used the term to explain how a society maintains order on the one hand, while permitting some degree of social change on the other (Ellis, 1971). This section will define the concept, articulate three stages in the control process, and distinguish two basic types.

Janowitz (1975: 82) defines social control as the process by which a society regulates itself according to desired principles or values. Since August Comte, the concept has explained the way social organizations deal with the relationship between disintegrating forces, such as industrialization in Comte's case, and their ultimate impact on the prevailing social order.

Janowitz traces the usage of the concept. While the term supplied a basis for integration and research until the 1940s, after World War II the context of social control came to reflect the more specialized interests of sociologists concerned with institutions that dealt with socialization and re-socialization processes (mental hospitals, for example). In these cases, social psychologists and sociologists narrowed their inquiries to the enforcement of norms in the institutional setting and relabeled "social control" as "social regulation."

This temporary narrowing of the term did not displace its classical use, however. Janowitz (1975: 96-104) shows that since 1945 social control, in its broadest possible context, has continued to appear and reappear in the sociological literature. He concludes that while some sociologists have transformed the focus of the term, the traditional use has persisted as a result of its inevitable relation to the political processes at a societal level.

The major advance in the intellectual history of social control has been its linkages to the political process and to the crisis of "political legitimacy." Those linkages can be accomplished, not by means of a sociological reductionism, but by a recognition of the boundaries of political institutions and the "supremacy" of politics in an advanced industrial society (Janowitz, 1975: 106).

One can ask, how do societies regulate individuals? How do street gangs maintain group cohesion? How does society control its educational institutions? At the heart of the answer to these questions is the process of social control. This process can be broken into three stages: promulgation of normative standards, surveillance of performance, and correction of observed deviation. Each state is discussed briefly in turn.

The social control process begins with the promulgation of norms (rules) regarding some behavioral standard. Informed by the particular values of that social organization, the first stage establishes the minimum level of behavior that is acceptable. Speed limits on interstate highways, for example, are set at 55 mph, room temperatures are set at 65 degrees, or antitrust laws are passed to prevent interfirm collusion.

For social control to proceed, however, the existence of a rule is not enough. The second stage involves the surveillance of behavior by a social control agent to determine whether or not the present performance conforms to the normative standard. Thus, state troopers use radar to detect speeders, a thermostat compares the temperature in the room with the established setting, and the Justice Department receives "hot tips" from unidentified sources.

If behavior conforms to the normative standard, we say the individual or organization has internalized the norm. If, on the other hand, we observe a deviation (a gap) between the desired behavior and the normative standard, the final stage in the social control process is invoked, namely, correction activities.

In this third stage, the social control agent attempts to resolve the discrepancy between actual performance and the established norm through the use of sanctions (rewards and punishments). In this stage, for instance, state troopers may issue tickets, the thermostat may kick on to warm up the room, and the Justice Department may initiate court proceedings, which eventually lead to injunctive relief. The resolution of this deviation, on the other hand, may also bring normative expectations closer to the present behavior. The relaxation of marijuana laws, for example, is a good illustration of how norms often change to conform to actual behavior rather than vice versa.

Thus, in any social organization, the purpose of social control is to encourage conformity. Sociologists argue that these internalized norms and values are the basis of social order: people, in effect police themselves. Yet, it is recognized that social control is never perfect. Rules may be inappropriate, surveillance by control agents may be limited, and correction possibilities may be severely circumscribed by law or custom.

Sociologists usually distinguish between formal and informal mechanisms of social control. Formal mechanisms are those organizations and roles specifically designated by society to enforce conformity. These include organizations such as the police department, the courts, and mental hospitals. Occupational roles such as psychiatrists, teachers, ministers, and social workers also fall into this category.

Informal social control mechanisms, by contrast, are less institutionalized and refer to those actions by elements who are not vested by society with the social control function. A silent stare from a lover, a juicy bit of gossip in a peer group, and a verbal threat of a manager -- as well as a smile, good grades in school, and other rewards for conformity -- are everyday mechanisms of informal social control.

The question for this chapter is to what extent is economic regulation a special case of social control. At first blush, the fact that the government is mandated to regulate entry, prices, and product quality, for example, suggests that economic regulation belongs in the domain of the economist who studies economic variables or the political scientist who studies political dimensions.

Based on the above discussion, however, an equally strong case can be made for the conception of economic regulation as a special case of social control. First, Janowitz (1975) has defined social control as the process by which a society regulates itself according to desired principles or values. Economic regulation, by the same token, is the process by which a government agency regulates an industry according to current values about the appropriate mix of competition and monopoly in that industry.

Second, although economic regulation often occurs at a state or local level, while social control is usually reserved for society's relationship to its individual members, Janowitz (1975) has also shown that social control has been narrowed by social psychologists to encompass socialization activities. Thus, the precedent exists for use of the concept at varying levels of analysis.

Third, the discussion on the three stages of social control, namely, norm promulgation, performance surveillance and the correction of deviation, are equally applicable to the activities of a government agency. Regulators, for example, create regulations and codes which establish behavioral standards for an industry. Next, the extent of economic conformity is surveyed by the regulator via specially trained examiners, the evaluation of data submitted by members of the industry, and/or periodic audits. Finally, when a deviation is uncovered, regulators often punish the deviant through the use of adverse publicity, open hearings, fines, or license revocations. Thus,

the stages of the process are completely parallel.

Finally, economic regulation by a regulatory agency can be viewed as a formal mechanism of social control. That is, it can be conceived as an organization specifically designated by society to enforce conformity in the economic domain. This is not to suggest, however, an absence of a government agency means that economic activities go unregulated. To the contrary, the existence of the invisible hand in the market place, as well as a whole host of other forces, suggest there will always be some type of mechanism to obtain economic order on the one hand and change on the other.

If this argument is persuasive, then the analysis of economic regulation should be particularly amenable to the conceptual tools of sociology. The next section, therefore, discusses the contribution of sociology towards a greater understanding of economic regulation.

#### Mapping the Regulatory Environment

With very few exceptions (Wiley and Zald, 1968; Joskow, 1973, Redford, 1962; Cutler and Johnson, 1975; Grafton, 1975), the boundary problem of regulation (McKie, 1970) has been delineated as either the economic "invisible hand" of the market place on the one hand, or the more "visible" inefficient intervention of the independent regulatory commissions, on the other. In a revolutionary perspective for his time, Merle Fainsod (1940) looked at whether administrative agencies could have any force and effect, while also suggesting an inquiry into other institutional forces and interest pressures that might affect the social control process. In an attempt to extend Fainsod's point, Redford (1962, 1969) postulated an ecological, anatomical, and physiological perspective to regulation. Though his approach suffers from the biological metaphor, it nevertheless expanded the boundaries of social control to include both formal and informal structures and processes that ultimately affect economic behavior. Finally, in an attempt to

redress the balance, Zald (1978) pointed out both the visible and invisible aspects of control. The current essay extends the work of Fainsod, Redford, and Zald by assuming that a realistic perspective on social control must go beyond the narrow analysis of the market place or administrative agency to include a whole array of structures that fashions the scope, content, process, and outcomes of social control decisions.

A promising way to study these structures is to isolate them in the form of a map and see how they contribute individually to the social control process. One such structure, for example, is the media. By emphasizing consumerism, the media may mobilize additional political resources that bring pressure on companies to lower insurance rates (Denenberg, 1972). In this way, the media plays an important role in social control process and might vary in its potency according to the extent to which it offers space to issues, investigations, or events pertaining to economic behavior. The central argument of this chapter, then, is that the understanding of social control is possible only through analysis of a whole array of structures in which the processes of social control operates. To support the argument, the structures of social control are divided into contextual, intentional, and informal control agents which vary in their potential and capacity to control institutional streams of social action (Thompson, 1967).

#### Contextual Elements

Contextual elements may be defined as those aspects of the social system which regulate behavior in some way. The basic contextual elements may be classified as technology and resources, cultural norms and belief systems, societal institutions, and stratification systems.

##### 1. Technology and resources

Technology includes the techniques used to transform raw materials into finished goods or services and managerial practices employed to coordinate

human activities. For example, the discovery of atomic energy required new structures of social control to regulate this novel phenomenon (Grafton, 1975). Likewise, unfair managerial practices led to the increasing insurrection of unions and the formation of the NLRB. Resources, on the other hand, are both material and financial and include special commodities such as air space. The effect of resources on social control structures was dramatically shown during the oil crisis of the middle 70s. When oil reserves declined, the FPC resorted to rationing and special policies to limit oil usage. When petroleum reserves were in more certain supply, restrictive social control policies were relaxed.

##### 2. Cultural norms and belief systems

Cultural norms are preferred behaviors or output states, departure from which calls forth sanctions (Zald, 1978). For instance, American society supports a norm that affirms the separation of church and state. This norm directs the government, through its regulatory machinery, to take steps to insure an absence of a certain kind of prayer in the public schools. Likewise, belief systems determine, to a large extent, the way in which social control operates. For example, the American ideology does not permit the state to use force or coercion in settling disputes except in extreme emergencies (e.g., the Memphis Police and Fireman's Strike). In contrast, totalitarian systems ideologically affirm both incentives and force to achieve social order (Bendix, 1956).

##### 3. Societal institutions and stratification systems

Societal institutions encompass standing arrangements within society which help to order its affairs (Redford, 1969). Examples include the family, religions, and educational institutions. School systems affect the social control apparatus in the way they carry out mandates of desegregation. In Boston some years ago, the situation became so serious that the Federal

court stepped in to assume crucial administrative functions of the local school board. Stratification systems are systems of status based on wealth, occupation, power, etc. One instance of the stratification system at work is discussed by Zeitlin (1974). Rejecting the earlier thesis on the adverse effects of the separation of ownership and control, he calls for a renewed sociological inquiry into the interlocking directorates and elite kin networks which control economic transactions. Zeitlin argues that this so-called managerial revolution (i.e., separation of ownership and control) is a "pseudo-fact" and that owners are still very much in control, implying control of the stratification system as well.

#### Intentional (or Formal) Elements

In his paper on the Social Control of Institutions, Zald (1978) distinguishes between intentional and non-intentional instruments of social control. While his approach tends to focus on intentional control elements and he correctly recognizes latent or non-intentional factors of control, he does not make these elements explicit. For our purposes, intentional control elements are those agents of society whose expressed function is to protect the public interest in the conflict between institutional performance, on the one hand, and societal standards (and preferences) on the other. In contrast, informal control agents are classified as constraining elements of control who may exert considerable influence, but who are either organized for different functions (e.g. the media) or represent a narrower segment of society (e.g. a trade association). The intentional elements may be categorized as norm defining structures, norm enforcing structures, and norm interpreting structures.

##### 1. Norm defining structures

Norm defining structures are those bodies who are responsible for inferring societal standards and normative preferences and translating

those preferences into codified laws of acceptable levels of institutional performance. The Congress and its committees at the federal level and the legislature with its committees at the state level, are vested with the responsibility of norm definition. They carry out this function by enacting laws that either regulate directly or create administrative commissions (e.g., ICC, FCC, FPC) for that very purpose. For example, Congress passed the Natural Gas Act in order to protect consumers against exploitation by natural gas companies (MacAvoy, 1970).

##### 2. Norm enforcing structures

Norm enforcing structures are those bodies whose responsibility it is to enforce societal normative preferences. The President (and his advisors), administrative agencies (HUD, HEW), independent regulatory commissions, state and local regulatory commissions, and the police and military make up norm enforcing structures. A typical case occurred when congressional hearings determined that gas producers' prices were not being determined in a competitive manner. The committee directed the FPC to control monopolistic pricing arguing that there was monopoly control of the in-ground gas and that the pipeline buyers paid higher-than-competitive prices for restricted total amounts of gas. The FPC proceeded to carry out its mandate (MacAvoy, 1970).

##### 3. Norm interpreting structures

Norm interpreting structures are those bodies whose responsibility it is to interpret the applicability of laws and codes on institutional performance. The judicial system makes up this element and through its "hearing" machinery decides the validity of conflicting claims. For example, in the monopoly case cited above, the Supreme Court (in the case of Phillips Petroleum vs. Wisconsin) ignored a counter-argument by Phillips which claimed their prices were not excessive and ruled that rates charged by producers may have a direct and substantial effect on the price paid by the ultimate consumer (MacAvoy, 1970).

It is important to note that while a distinction has been made according to functional criteria, control structures actually perform multiple functions. Two examples are apparent. On the one hand, commissioners of independent regulatory agencies also have the power to define norms through the regulations they propose to the legislature and they also may interpret norms through hearings and appeal machinery within their agencies (Kimball, 1963). On the other hand, accrediting agencies such as the Joint Commission on the Accreditation of Hospitals and interstate coordinating agencies such as the North Central Association which evaluates colleges and secondary schools in the north central states (see Wiley and Zald, 1968) are examples of agencies which perform simultaneous control functions of defining, enforcing, and interpreting.

#### Informal Control Agents

Informal elements of social control are defined as those structures in an industry's environment which are not formally vested with the social control function, but which perform such functions in the process of carrying out their own activities. For example, a community attempts to increase the "quality of life" for its inhabitants. When an event such as the Concorde supersonic jet threatens the "quality of life" in the community, it is hypothesized that the community will act with vigor to constrain the appropriate parties from such interference. While the community is not by mandate a social control agent, it becomes one by virtue of the Concorde's interference with its own activities. Other constraining elements may include customers/clients, suppliers, supportive services, professional associations, political parties and politicians, competitors, protest groups and social movements, charismatic individuals, unions, media, trade associations, elites, boards of directors, and umbrella organizations. Each will be discussed briefly in turn.

#### 1. Communities

Communities are groups bound together by common geography, goals, values, or interests. In discussing communities, it is important to distinguish between geographical communities and communities of interest. While the Concorde example discusses a geographical community, the strong Jewish pressure regarding America's Middle East policy (which in turn affects the behavior of the military-industrial complex) reveals the effects of social control from a more dispersed community of interest.

#### 2. Customers/clients

Customers/clients are consumers of transformed raw materials. Historically, the invisible hand (i.e., price system) of the market place on the regulatory agent has served to regulate economic behavior. There is a growing awareness of more direct action, however. That is, customers/clients are now turning to boycotts, selective shopping practices, and increased demands for quality and consumer protection as means of direct control over the products/services they receive. Denenberg (1972) documents the current trend of an attempt to take consumer protection out of the hands of government alone and restore it to its logical repository -- the consumers and their market place.

#### 3. Suppliers

Suppliers refers to providers or resources for the transformation process. Since resources vary in their degree of availability, we would expect that resource providers vary in the degree of control they exert on an economic behavior. The classic example can be found in Perrow's (1965) discussion of the role of the physician in the hospital. Since physicians contribute scarce and valuable resources to the transformation process of patients, physicians have a great degree of power to constrain the goals, budget expenditures, and behavior of the hospitals in which they work. Though constraint is not a physician's primary activity, it becomes important

when the physician attempts to manipulate the level of institutional performance he/she experiences.

#### 4. Supportive services

Supportive services may be defined as those services outside the direct control of the industry yet contributing to the transformation process. Redford (1962) distinguishes between direct service groups in the air transportation industry such as airlines and air pilots and supportive service groups such as manufacturers of airline equipment and research organizations. Recent air traffic controller slow-downs are cogent examples of the ability of supportive services to control the airline industry.

#### 5. Professional associations

Professional associations are groups of "professionals" bound together to advance the goals of their profession. While these goals may range from rest, relaxation, professional growth, or affiliation, there is also ample evidence to suggest that professional associations exert considerable influence on both the government and institutional behavior. For example, in her book Hidden Hierarchies: The Professions and Government, Corinne L. Gibb (1966) argues that "the patterns of professional associations, their ethic and activities, and their changing relationships with public government have been reactions to, and play a functional role in, the evolution of an interdependent, increasingly complex, industrialized (hence urbanized) economic system" (Gibb, 1966: 27). When the AMA resists socialized medicine, we see ample proof of their profound influence on the activities of government (Perrow, 1972).

#### 6. Political parties and politicians

Political parties and politicians have long had the power to affect economic behavior. Sometimes they take the form of "toothless tigers" (Wall Street Journal, August 2, 1973) or charismatic renegades (Serber, 1975). In the case of toothless tigers, it has been argued that politicians have

maintained close, cozy relationships with the executives of the industries they regulate and that there is a good deal of job cross-over between the regulator and the regulatee. In contrast, politicians have on occasion been dynamic and consumer-oriented. Herbert Denenberg, previous Commissioner of Insurance in Pennsylvania is a case in point (see Serber, 1975 and Denenberg, 1972).

#### 7. Competitors

In public utilities or other natural monopolies, the controlling effect of a competitor is nonexistent. That is, the lack of the existence of a product/service substitute removes a valuable control mechanism. Hirschman (1970) has argued, for example, that the presence of competitors can have two primary effects on the recuperation of a firm. On the one hand, competitors provide an available alternative for dissatisfied customers thereby increasing the possibility of exit which will, in turn, signal a need for repairing the firm's lapse. On the other hand, Hirschman also points out that firms will often collude in an exchange of each other's dissatisfied customers so the effects of the exit option are never really felt. Joskow (1973) and Posner (1974) evaluate the presence of competitors as the necessary conditions for cartelization. While free-rider problems must be faced by the cartel (Olson, 1965), the point is that the presence of competitors controls an institution's performance in many direct and indirect ways.

#### 8. Protest groups and social movements

Broadly defined, protest groups and social movements are collectives of individuals attempting to promote or resist some change in society (Killian, 1965). For example, the growth of the women's movement has had a profound effect in creating "affirmative action" programs regarding hiring, promotion, and firing practices of institutions. While the issue attention cycle may render many of these protests and social movements a transitory



phenomenon (Downs, 1972), the aggregation of discontent and mobilization of slack political resources (Oberschall, 1973) can also have a significant impact on the allocation of society's resources.

#### 9. Charismatic individuals

Weber (1947) defined charisma as the "gift of grace." Translated in terms of social control, it means that certain individuals, by virtue of their reputation, personal qualities, or normative stance, have the ability to attract and direct a significant number of adherents. Ralph Nader, Martin Luther King, John Kennedy are recent examples of charismatic leaders who wielded considerable moral force and influence on institutional behavior. The presence or absence of such leaders may have significant implications for social control.

#### 10. Unions

Unions are groups of workers who band together for the purpose of collective bargaining with employers. While they are formed primarily to secure fair and equal benefits for their members, they can indirectly constrain the firm, the industry pay structure, and the behavior of other related unions. Furthermore, Kuhn (1961) argues that unplanned processes within the union, such as fractional bargaining, have profound effects on other work groups, the union, as well as the company itself.

#### 11. Media

The media refers to any communication channel engaged in disseminating information to large numbers of people. While an example of the media has already been mentioned, it might be pointed out that control agents and target institutions often compete for use of the media to shape normative preferences and belief systems. For example, commissioners often threaten or use "adverse publicity" to achieve normative compliance (Gellhorn, 1973), report illegal rebate practices to bolster their public image (Wall Street Journal, May 5, 1975), and reveal denials of rate increases to support their

"protection of public interest" mandate (Wall Street Journal, October 30, 1975). Economic institutions, on the other hand, might use the media to deny commission allegations (Wall Street Journal, August 22, 1974), to outline the industry position on crucial issues (Wall Street Journal, February 14, 1974), or to shape a favorable public opinion (Denenberg, 1972).

#### 12. Trade associations

Trade associations are similar to unions and professional associations in that they attempt to advance the collective goals of their members. For example, airlines form an Air Transport Association and pilots form an Air Pilots Association (Redford, 1969). Once again, while these organizations possess multiple goals, each is a center of action geared to exert constraining influence on various institutions that interfere with their transformation or demand aggregation activities. Thus, Redford (1962) reports that the Air Transport Association helped crystallize the Civil Aeronautic Board decision in 1958 to have a common system of air traffic control (for military and civil aviation).

#### 13. Elites

Elites refers to the dominant group in an institution or society that controls the policy making structure. Some authors argue that there is an interlocking directorate of power among a small group of elites in the economic, political, and military institutions of American society (Mills, 1958; Zeitlin, 1974; Dahrendorf, 1959). Others have argued that elites have become separated from control (Berle and Means, 1932) or do not in fact exert complete control (Lindblom, 1968). The point is that ever since Marx, the role of elites on economic behavior has been an issue to be investigated.

#### 14. Boards of directors

Boards of directors are those bodies of an institution who possess ultimate responsibility for institutional behavior. While boards vary in the degree of control they exert, they do possess special internal and external detachable resources (Zald, 1969) which can significantly affect an institution's strategic contingencies such as life-cycle problems, succession, and funding (Zald, 1969).

#### 15. Umbrella organizations

Umbrella organizations are holding or parent companies which produce no actual product or service of their own but who own many subsidiary companies who do. The rise of the holding company reflects a glaring weakness in the social control process. For example, predatory parent companies can and do siphon millions out of the insurance companies they hold legally or illegally and risk depleting reserves to dangerously low levels. Through a series of ingenious ploys, umbrella organizations are often able to evade regulators (Wall Street Journal, August 2, 1973).

This chapter has argued that to understand the process of social control, analysis must include a whole array of structures comprised of contextual, intentional, and informal control elements. In contradistinction to the narrower perspectives of the visible (i.e., regulatory commission) or invisible (i.e. market place) hands of social control, the current view is that each of the structures analyzed is itself a complex organization with goals and influences both within its organizational context and beyond. While analysis of the specific structures themselves may be of interest to some theorists, it has been argued here that each control structure has the potential and the capacity to influence economic performance.

Individual analysis of the separate structures of control, however, is meaningless unless it can be related to the wider array of control forces.

In other words, to focus, as we have, on one structure at a time is to ignore the multiple forces which impinge on the economic institution and shape its compliance behavior. Unfortunately, earlier studies of a particular commission and its regulated industry did not account for these multiple structures of influence.

With the sociological structural map delineated, the discussion now turns to a closer evaluation of the process components which make up the regulatory function. The discussion will highlight components from the view of both the control agent and the regulated industry.

#### The Analytic Dimensions of Regulation

The conceptual framework described below was developed to provide a distinctly sociological perspective of the regulatory process. As such, the reader will recognize concepts which, for the most part, have been used by sociologists to describe behavior of individuals acting alone or in groups. The way in which these concepts are utilized in this analysis differs somewhat, however, from their normal usage by sociologists. First, the unit of analysis is not an individual but an organization or institution. An underlying assumption of this analysis is that, in some respects, organizations can be viewed as exhibiting characteristics similar to those of individuals.<sup>1</sup> Organizations attempt to perform certain functions -- their task role -- and are either successful or unsuccessful. In the process of fulfilling their role -- selling cars, manufacturing boilers, delivering medical services -- organizations are subject to the norms supported by other organizations performing similar functions, often termed industry practices. Some of these accepted ways of doing business are sanctioned by external agents with formally delegated authority while others are sanctioned by members of the industry.

<sup>1</sup>William Evan's concept of organizational set (1966) is relevant to this analogy and has been relied on in the development of certain aspects of this framework.

Second, concepts employed in this analysis are not all uniquely derived from the sociological literature. Some of the concepts have been borrowed and freely adopted from the legal field, from political science, from social psychology, from business administration, from organization theory, and from economics as well as from a predominantly structural-functional sociological tradition (which the authors share). The concepts were chosen then, not for their theoretical purity, but because together they seem to provide a greater overall analytical precision than other conceptual frameworks somewhat limited by their particular discipline orientations.

The conceptual framework is divided into seven conceptual clusters. Each cluster is directed at one aspect of the process by which entities -- in this case regulatory agents -- attempt to influence specific targets or industry members. The conceptual clusters were chosen because they provide both a dynamic and a broad perspective of the regulatory process. The choice of clusters then already reflects certain dispositions held by the authors: 1) that regulation cannot be viewed as a static phenomenon but must be viewed as a dynamic process in which the responses of one actor become information for the other actor's consideration, and 2) regulation cannot be understood by focusing only on the regulatory agent and the target it attempts to influence, but on the whole pattern of relationships in which both control agent and target are embedded.

Each cluster is divided into a number of dimensions which can be utilized to analyze a specific aspect of the regulatory process for a given industry. One of the assumptions implicit in the division of each conceptual cluster into a number of dimensions (the reader may even think an

overly large number) is that other conceptual frameworks are often too simplistic or too ill-defined to provide much analytic utility. The complexity of the subject requires a complex set of concepts and variables. To deny the complexity by reducing conceptual and theoretical frameworks to a small set of "powerful" indicators is to remove the model of regulatory behavior too far from reality and consequently to constrain its capability for explaining variance. Although strictly speaking, the framework advanced here is only conceptual at this stage of development, it is hoped that it will become the basis for the formulation of a comprehensive theory of the regulatory process (see Lowenthal, 1978 and Berger, 1978).

The seven conceptual clusters used in this framework are:<sup>1</sup>

- .social organization
- .norms
- .performance curve
- .control agents
- .surveillance capacity
- .sanctions and incentives
- .compliance readiness

In the rest of this section each cluster will be defined and its relationship to the regulatory process as a whole and to other clusters in particular will be described. In addition, examples or indicators will be given for the dimensions associated with each of the clusters. The reader will recognize at once that the clusters vary in their distinctness and independence. Some of the clusters are neatly detached from the others (for example, the norms cluster is conceptually independent from the control agents cluster), while others are less so (the sanctions and incentives clusters are sometimes difficult to disentangle from the compliance readi-

<sup>1</sup>The authors recognize the earlier work of Zald and Wiley (1968), Zald and Hair (1972) and Zald (1975) in the initial formulation of these clusters.

ness cluster). Finally the literature has been cited wherever it seemed relevant or appropriate, more for the reader's appreciation than for any particular contribution which it makes to this framework. It may be helpful for the reader to keep in mind that the clusters are intended for the analysis of the members of an industry and of the control agents explicitly mandated for the regulation of specific aspects of those members' behavior.

#### Social Organization

The structural context refers to the setting in which the process of social control occurs (in this case regulation). Specifically we refer to the social organization of the structural context as the organization of those parts of the setting of an industry having direct control or ability to sanction industry members or institutional components (Dahl and Lindblom, 1953). Organization, in this sense, means the pattern of influence relationships in which both control agents and control targets are embedded. Industry member behavior may be monopolized completely by one control agent or the control may be shared by a number of agents. The setting of a particular industry is the social environment comprised of the industry members and any element which either influences or can potentially influence the behavior of members of the industry.

For example, a chemical refinery in the Soviet Union would have its behavior determined by the central planning unit, essentially a hierarchical context in which the target is completely dominated by the agent of influence. A chemical refinery in the U.S. may be subject to a number of control agents, no one of which can completely dominate its behavior but whose influence or influence-potential must be considered in the selection of a given behavior alternative. The refinery must provide suitable working conditions (OSHA), must not pollute (EPA), must maintain produce specifi-

cations (American Society of Mechanical Engineers), and must avoid the appearance of windfall profiteering (Ralph Nader). So although there is some flexibility in determining the type of output, the volume of output, the market segmentation, and the distribution configuration, there exists, nevertheless, a number of control agents in the social environment of the industry which can partially determine the behavior of the industry members.

The dimensions which seem useful for the analysis of the social organization are the following:

- resource concentration and dispersion
- degree of inter-agency linkages
- degree of inter-agency exchange
- degree of inter-agency interdependence
- stability of contextual arrangement

The extent to which either the control agent or the control target is capable of mobilizing influence resources determines the nature of the power-dependence relationship between them. At the same time, the amount of and access to influence resources determine the number of control agents who can significantly become involved in determining the influence target's behavior. A critical dimension, therefore, of social organization is the degree of influence resource concentration and dispersion. Organizational contexts in which the influence resources are entirely dominated by one control agent (i.e., high resource concentration on the control agent side) can be termed hierarchical contexts. Contexts in which influence resources are dispersed among a relatively small number of control agents can be termed polyarchic contexts. Finally, contexts in which influence resources are completely concentrated in the hands of buyers of industry output (concentration on the output side) can be termed market contexts.

In most democratic societies, polyarchic contexts are predominant

whereas totalitarian societies are characterized principally by hierarchical contexts. The market context represents more of a classical economic ideal and can rarely be found in reality. The market context is also different from polyarchic and hierarchical contexts in that control is exerted through the price-mechanism only and does not represent intentional control on the part of any one intentional buyer. Rather, the price system aggregates individual choices in order to influence industry behavior.

Organizational contexts can also be characterized by the number of linkages which individual control agents have with other control agents (the rest of this section assumes a polyarchic context). The extreme cases would be contexts in which the various control agents had either no linkages or continuous linkages. Linkages can be defined as any type of contact between control agents either formal or informal, personal or impersonal, for whatever purpose. For example, agents of the FBI and the IRS may meet informally to discuss surveillance of suspected syndicate fronts but may have no formal contacts. On the other hand, linkages may involve the joint programming of control agent activity such as occurs between DOL and DHEW in the implementation of WIN (Work Incentive) program by the individual states. One could also characterize linkages with regard to their degree of turbulence (Emery and Trist, 1965). Linkages could be stable and unshifting (no new entry or exit of control agents, no altering of existing relationships and interaction patterns). Linkages could, on the contrary, be constantly shifting caused by turnover in intentional control agents.

Linkage among control agents implies an exchange of resources. It would be difficult to imagine a linkage which did not involve an exchange of some kind or other, regardless of the informality of the contact. According to the Levine and White model (1961), exchanges typically involve a transfer of people, materials, or information from one organization to another. When the SEC informs a state department of insurance of the irregular

trading practices on the part of a firm domiciled in that state, there is an explicit exchange of information. In the same manner, surveillance agents or devices can be transferred, temporarily or permanently, from one agency to another.<sup>1</sup>

The exchange of resources among control agents leads to relationships of dependence and inter-dependence (Blau, 1964; Homans, 1961; Thompson, 1967). Organizations which are the recipients of resources -- budgetary, legitimacy, volunteer support -- incur a debt to the resource provider which must be repaid in order to continue receiving the resource exchanged. A control agent that provides information to another agency expects reciprocity in its own area of surveillance. An ungrateful recipient (i.e., one which does not recognize its obligation) will quickly be excluded from further exchange or experience reduced levels of exchange so as to be less capable of performing its function with an unaltered level of expenditures.

Finally, the distribution of influence resources may not remain stable over time but may shift from one contextual arrangement to another. Turnover in control agents almost inevitably leads to a reallocation of influence resources since the influence resources mobilized by one agent may become deployed or activated by another agency. One of the most interesting aspects of a shift in distribution would be the implications, if any, which such a shift would imply for the type of contextual arrangement. For example, shifts in distribution which lead to increasing mobilization of influence resources by one or a few control agents may represent a trend from polyarchic context to hierarchical context.

---

<sup>1</sup>Levine and White also suggest other aspects of exchange relationships which would be equally applicable here.

### Norms

Norms are preferred behaviors or expectations which are defined for focal entities by agencies which the focal entity consider to be legitimate sources of norm-setting authority. In the context of this analysis, the preferred or expected behaviors are the accepted procedures by which industry members conduct their practice or manufacture and distribute their products. The focal entities are the industry members and, in the framework of social psychological inquiry, the objects of normative pressure to conform. Norm-setting authorities can be as broadly conceived as society and as narrowly defined as a single individual. For example, a dominant norm-setting authority for doctors in the U.S. is the American Medical Association, while a significant one for television news commentators could be Walter Cronkite. The legitimacy conferred on the norm-setting authority can originate either from the focal entity or from a source external to the norm-setting authority. In the case of professional associations, legitimacy is conferred by members of the association while independent regulatory commissions (SEC, FTC, etc.) derive their authority directly from Congress and the Constitution.

Norms of institutional behavior provide the basis of the regulatory process. In the absence of well defined norms, formal regulatory bodies could not be created. In small groups the desired and expected behavior of individuals is controlled in various informal ways (see, for example, Homans, 1967; Thibaut and Kelley, 1959; Roethlisberger and Dickson, 1939; or Blau, 1964). These informal mechanisms include status-conference, approval, joking, sarcasm, anger, and isolation. The social control of institutions requires more formal mechanisms (the stakes of compliance are higher), and most of the norms considered in this analysis form a distinct subset of norms known as laws (Gibbs, 1965). Laws are norms which have

been explicitly and precisely defined and for which specific penalties exist in situations of non-observance. In its concern for the range of performance and behavior of a given industry, society, or a subset of society, creates regulatory bodies to establish precise norms of performance behavior, oversee compliance with the norms, and assign punishment when compliance is not met.

In the sociological literature, there have been various approaches to defining norm characteristics. For this analysis, we have relied principally on sociologists Morris (1956) and Gibbs (1965) and a member of the legal profession, Johnson (1969). The dimensions which seemed most appropriate are:

- |  |                             |
|--|-----------------------------|
| ·clarity                                 | ·mode of transmission       |
| ·technical visibility                    | ·consistency of application |
| ·consensus                               | ·stability                  |
| ·degree and timing<br>of internalization | ·dominant type              |
| ·source of norm<br>authority             | ·intensity                  |

These dimensions refer both to the objective manifestation of norms, for example, clarity, as well as the definition of norms by an external agent, such as technical visibility (which itself is a function of the control agent's technology of surveillance). It will also become clearer later that several of these dimensions are related to other clusters in this framework. For example, the visibility of a norm affects the degree and manner in which it can be monitored (cf. surveillance capacity). In like manner, the consensus surrounding a norm is related to the degree of compliance readiness.

One of the primary characteristics of a norm is its clarity or the extent to which the content of the norm is concrete and distinct from

other norms. For example, the regulation that firms should not engage in practices which limit or reduce competition is a relatively vague and unclear norm. A regulation specifying that banks maintain a certain percentage of checking and savings account deposits as cash reserves is a relatively clear and unambiguous norm.

Closely related to the clarity of a regulation is its technical visibility, or the extent to which compliance with the norm is easily measured by existing measurement devices. The measurement devices can range from human observation to sophisticated technological automation. The pressure capacity of boiler makers is not readily visible and must be measured by relatively technical equipment. The same is true of many foods and drugs. On the other hand, bank balances (if they are not falsified), most occupational health and safety codes, and commercial wiring are readily observable by a trained agent.

The consensus of a regulation refers to the extent of agreement with the norm by those to whom the norm can be potentially applied.<sup>1</sup> When busing was introduced by the Supreme Court, one would say that there was a low degree of consensus with the norm by southern states. Lack of consensus does not necessarily mean opposition but also conflicting degrees of commitment and interpretation. For example, there was widespread disagreement among automobile manufacturers about the feasibility of complying with DOT engine emission standards. The disagreement was not so much with the objective of reducing the level of pollution but what the new standard should be, when it should go into effect, and who should pay the cost of compliance.

Norms don't always emerge and become accepted by focal targets in

<sup>1</sup>The use of consensus in this manuscript differs somewhat from Zald's use in which consensus connoted the extent of agreement among societal control agents.

similar ways. In some cases, regulations are announced by the regulatory agent and the target is expected to comply immediately. In other cases, however, especially those in which norm compliance is not supported by coercive authority, new members of the group to which the norm applies internalize the norm over a period of time. Sociologists refer to this process, by which new members come to accept and comply with group norms, as socialization and internalization. Internalization differs from socialization in that the former addresses more the result of normative pressure to conform while the latter addresses the specific application of normative pressure.<sup>1</sup> Norms that are deeply internalized are ones which motivate compliance behavior with little or no external stimulus (sanction). Those that are only shallowly internalized must be constantly reinforced by external sanctions. Most professional associations are composed of members who have internalized norms over a long period of training and indoctrination.

Norms can differ in the source and type of authority which promotes compliance with the norm. The source of authority can be normative, such as in most professional associations, remunerative/calculative as in industrial trade associations, or coercive as in most state and federal regulatory agencies. In some cases, there may be various sources of authority for a given norm, but there will almost always be a dominant source. In the examples used in this analysis, the source of norm authority will be the regulatory agent and the type of authority will be coercive.

Norms are communicated in many different ways: interpersonal interaction, announcement, modeling, correspondence, etc. The mode of transmission, or the means by which the norm is communicated to those from whom

<sup>1</sup>See Etzioni (1961) for a good description of the process of socialization in organizations characterized by different types of compliance structures.

compliance is expected, is fairly uniform in the type of regulatory agent studied in this research. In the case of utilities, interstate commerce, and some types of communications industries, the prevailing type of norm is a "rate," and the rates, however arrived at, are communicated to the target (industry members) by written announcement. The rates, then, are recorded in some form, code, rate manual, rate schedule, so that they are readily available to anyone.

A particular concern of the legal profession has been the manner in which norms are applied fairly and without discrimination to all focal targets. The consistency of application refers to the extent to which a regulation is enforced in a similar way with all industry members, regardless of any specific characteristic of the member (size, region, etc.).

The stability of a norm is the extent to which the norm is enduring and resistant to change. Long-lasting norms increase the probability of the surveillance technology, improve both clarity and consensus, decrease the cost of compliance and positively affect the relationship between the regulator and the target.

Norms can be classified according to the focus of the norm content. Norms can focus on the ownership of an institution, the inputs and processes utilized by a specific institution, or the outputs of the institution. In some cases, the norms will be specific to an industry, while in others they will be similar across different industries. An example of an ownership norm is that anyone with a previous criminal record cannot own or manage a brokerage house (SEC regulation). Although there will be a number of different foci for the members of a given industry, there will usually be a dominant focus of the norms.

Finally, the intensity with which the norm is professed and sanctioned is an important way in which norms differ. Compliance with some

norms will be intensely valued while that for other norms much less so. The intensity with which a norm is valued by a control agent will, of course, affect many aspects of the control agent's behavior. Increased efforts in surveillance, the mobilization of influence resources, and the visibility of sanctions are all associated with intensely-held norms. Falsification of accounts is an example of a norm violation which is closely monitored (annual and spot audits), rapidly responded to (place the bank in conservatorship), and publicly announced (widespread news coverage).

#### Performance Curves

One of the difficulties in the field of regulation has been identifying appropriate dependent variables for explanation. One promising variable whose potential has been overlooked are the standards of performance of the members of a given industry. Performance of an organization can be segmented into various components. At a macro level, performance can be divided into an external and an internal perspective (Dubin, 1975). The internal perspective addresses the extent to which the organization achieves efficient levels of throughput and output. The most commonly used indicator of internal efficiency is profit after taxes, but there are many others (return on investment, return on equity, book value of the revenue-producing installations, earnings per share, etc.).

Internal efficiency, however, does not address the social issue of resource distribution and utilization. A profit-making plant may not be considered efficient if it pollutes the air and streams in the local community. Because externalities are usually so difficult to compute, most organizational analysts concentrate on internal aspects of performance (leaving such implacable issues as the social rate of discount and shadow prices to economists who seem to enjoy this pain-inducing area of inquiry).



Within the organization, one can identify three areas: 1) work-related areas of performance such as safety (number of accidents), overhead, waste, productivity, innovation, climate (grievances, disciplinary memos), training, worker commitment (absenteeism and turnover), or theft; 2) compliance-related areas of performance such as emission control, worker safety, quality control, or record-keeping; and 3) industry-related comparative performance such as share of the market, sales, number of personnel, marketing, or R&D expenditures, and so on.

A performance curve is the range or distribution of performance along any of the dimensions mentioned above of all of the institutions in a given industry. For example, all hospitals could compute a cost per patient-day figure and the aggregation of all hospitals would represent a performance curve for a specific segment of performance (see Zald, 1971, for other examples of performance curves). Performance curves vary principally in their shapes. Allport described the classic J-curve for norm conformity in 1934, and this curve would seem most appropriate for performance in compliance-related areas. The shape alone, however, is only a global characteristic of the performance curve. Other dimensions of interest would be the pattern of intra-curve variation. There may be a wider distribution of points at some segments of the curve and narrower at others. The shape of the curve may vary over time or it may remain relatively stable. Finally, curves for similar performance dimensions may vary between industries. A comparison of inter-industry curves on various OSHA standards might provide illuminating results regarding the relationship between compliance and technology.

### Control Agents

As discussed earlier, control agents can be divided into a class of intentional agents and a class of informal agents. The latter differ from the former in that they have no authorized mandate or legitimacy for the control of institutions but, through their actions, exert significant influence on the behavior of institutions. In addition to this rather macro-classification of control agents, there are a number of dimensions which differentiate control agents within either category. Several of these dimensions have appeared in earlier sections (particularly "social organization"), a fact which initially stimulated the authors to push for more "powerful" conceptual simplicity. It was our feeling, however, that the cost of repetition might be repaid by the increased connectedness and inter-relatedness of the framework.

One of the primary dimensions which differentiates control agents is the availability of resources to it or the sanctioning of non-conformity (this theme will be taken up in greater detail in the final two sections of this chapter). A related dimension is the ease with which the resources can be mobilized and deployed.<sup>1</sup> Agencies may have friends in Congress responsible for budget appropriations. On the one hand, an agency with such a sponsor (a classic example is Mendell Rivers and the military institution) may be rich in resource availability -- both the sponsor and the appropriations are resources -- but may be limited in its ability to mobilize the resources (only once a year).

Three dimensions which are intimately related to resource availability are the power, prestige, and status of the particular control agent. Although the layperson does not always differentiate these three concepts,

<sup>1</sup>See Blalock (1968) for an interesting discussion of resource liquidity and power. Gamson (1968) also deals with the liquidity issue.

sociologists have usually been careful to point out distinctions (Weber, 1947; Lenski, 1966). Power is the ability of the control agent to impose its will on an institution against its resistance. Prestige is the esteem which the control agent elicits from the institution, and status is the standing of the control agent relative to other control agents for a given industry. All three dimensions are interrelated, each one causing and being caused by the others. They are not, however, necessarily synonymous and interchangeable. The state alcohol commission may be powerful in granting operating licenses to liquor stores and night clubs, may have a lower status than the state legislature, and have more prestige than the local police.

Control agents may experience an explicit or implicit division of labor with other control agents. The most common example of an explicit division of labor is with regard to sanctions. The regulatory agency can determine noncompliance and assess civil penalties but is rarely empowered with police coercion or physical sanctions. An implicit division of labor frequently occurs with regard to surveillance. For many regulatory agencies, infractions are reported by non-agency personnel (e.g., the FCC). The type of division of labor may depend on the degree of goal conflict or goal compatibility among control agents. It is quite conceivable, for example, that control agents will have almost diametrically opposed goals for the same industry. Auto makers are confronted with such diverse demands as increased safety features by the Highway Safety Act, increased mileage by the Congress and the consumer (for different reasons), reduced pollution by the EPA, and non-inflationary prices by the Price Control Commission.

Control agents, like the norms which they attempt to enforce, vary both in the focus of their mandate and the activity and also in the intensity with which they pursue that mandate. Some control agents will be responsible for very precise and limited segments of performance, while others may have

broad discretion with respect to the performance segments controlled. The intensity of effort may range from little or no intensity (House Subcommittee on Unamerican Activities) to extreme intensity (the Surgeon General).

From the perspective of a target industry, the set of control agents relevant to its operation varies in number, stability, and resource aggregation. At a given point in time, an industry will be faced with a specific number of control agents (many or few), and that number may increase or decrease over time. Each control agent will possess a certain amount of influence resources which can be potentially applied against an industry, and both the capacity of the individual agent and the aggregate concentration of the set of agents for an industry may vary or remain stable over time.

#### Surveillance Capacity

According to Thibaut and Kelley (1959), norms reduce the costs of surveillance; the expected behavior is internalized within the individual and does not usually require an external stimulus to promote compliance. In the field of regulation, the degree of internalization varies widely. Some norms, such as wages and hours laws which are thoroughly internalized, require little surveillance, while others, such as border maintenance, require continuous surveillance.

Although the surveillance capacity, and the following cluster sanctions, are properties of the control agent, their substantive importance in the regulatory process requires that they be treated as separate concepts.

Surveillance can be defined as the measurement of the gap between desired behavior and actual behavior. The EEOC determines if organizations are in compliance with affirmative action regulations by comparing personnel records with required minority representation. Surveillance can be on-going or can be periodic, but whatever the timing, it represents a problematical

concern for any regulatory agent. Surveillance is problematical because it requires an expenditure of resources by the regulatory agent above the resources required for the normal day-to-day maintenance of the organization. Most regulatory agents complain of the lack of resources which are made available for surveillance. For example, both the U.S. Customs Service and the U.S. Immigration Service are responsible for surveillance of vast domains (miles of border and numbers of illegal aliens). Given the budget appropriations for surveillance, it would appear that surveillance was often a secondary consideration of lawmakers and that their principal concern was the creation of the regulatory agent rather than its effective functioning. In this conceptual cluster, then, the dimensions of interest are those which reflect the agent's capacity for surveillance.

As can be seen from the above, a primary dimension for the control agent is the aggregate amount of resources which can be utilized for surveillance. Regulatory agents will vary widely in the extent to which resources are adequate for the surveillance task. A related dimension is the technical complexity required for surveillance. In many situations, the EPA must utilize expensive, sensitive technical equipment to determine the effects of an institution's actions on the quality of the environment. Many activities can be technically complex, but not require sophisticated technological devices. For example, the examiners for the SEC receive extensive technical training in order to decipher massive amounts of financial data. So, in addition to technical complexity, the extent to which the surveillance technology is labor intensive or capital intensive is an important distinction. Both technical complexity and labor intensity are related to the cost per unit monitored. Some agents have relatively few units to monitor (automobile manufacturers) but require sophisticated equipment. The unit cost is a bottom-line indicator which accounts for number of

units, technical complexity, and labor/capital intensity.

Regulatory agents differ in the extent to which they can delegate surveillance to other agents. Some agents depend almost entirely on complaints from clients (consumer protection bureaus) for their surveillance and maintain very small surveillance capacities. The U.S. Treasury depends on bank tellers to spot the occurrence of counterfeit money but does not delegate surveillance of known counterfeiters to others except authorized law enforcement agencies. A recent concern has been the legitimacy of the surveillance technique. Phonetapping, letter opening, and break-ins, while they may be effective monitoring techniques, have been accorded low legitimacy and do not often produce information which can be presented for enforcement.

Surveillance techniques vary in the range of phenomena for which they can be utilized. For example, a micrometer can be used in any situation which requires a precise measurement of width. A sensitive diathermal cytosopic magnetizer can only be used in imaginary situations just created by the author to remind him to look up an appropriate example for this space. Finally, surveillance techniques can be distinguished by their stability. Micrometers can always be used to measure width. In other areas of performance, however, the technology required for measurement may be unstable and rapidly changing. New manufacturing processes can require the development of more sophisticated monitoring devices; labor intensive devices may require upgrading through professional training to meet new situations.

#### Sanctions and Incentives

Once surveillance has occurred and the agency determines that there has been some deviation from the expected patterns of performance, the issue of sanctions becomes problematical. Although sanctions may be legitimately invoked whenever regulations are not complied with, the actual use

of the formal sanctioning mechanism does not necessarily also occur. The use of sanctions by administrative agencies involves a complicated calculus (Zald, 1975) encompassing many factors, only a few of which are covered by the formal mandate on charter of the agent. In an experimentally-designed system (such as those used by psychologists to determine the learning capacity of rats), the performance of an inappropriate response, whenever or however it occurred, would elicit some form of sanction or punishment. This is true because the system designer controls all of the system's reward and punishment resources. A rat cannot influence the experimenter by its decision to not comply, nor do reward and punishments have secondary effects on their participants (i.e., rats being made to wait on the sidelines). In reality, however, regulatory agents rarely have a monopoly on influence resources and must be constantly concerned about the degree of sanction required to produce compliance, its capacity to deliver a given sanction, the effect of the sanction on others than the offender, the probability that the offender will comply and the effects of failing to induce compliance if non-compliance is sanctioned.

One of the most frequent criticisms of the functioning of regulatory agencies is that they do not have adequate sanctioning authority commensurate with their control function (Nelson, 1964). The charter of most regulatory agencies refers to formal judicial authority as a means of compelling obedience. For example, the EPA may resort to a court order to prevent a metropolitan heating and cooling plant from operating without the installation of proper anti-pollution devices. Formal sanctions are, however, difficult to use and not always effective or appropriate. As a result, regulatory agencies resort to many informal and unauthorized means of sanctioning undesirable behavior (Chamberlain, *et al.*, 1942).<sup>1</sup> One of the

<sup>1</sup>For a fascinating, though critical review of publicity as an informal sanction by administrative agencies, see Gellhorn (1973).

consequences of the increasing tendency of regulatory agencies to rely on informal, coercive sanctions as a compensation for weak formal authority is the neglect of the sometimes equally effective positive sanction. According to Baldwin (1971), positive sanctions are much cheaper than negative sanctions, require less surveillance, are easy to legitimize, promote confidence instead of inspiring fear, develop stability, and have reinforcing after and side effects. Whether sanctions are positive or negative, the literature on social control has not been well developed, relying predominantly on simplistic typologies (Clark and Wilson, 1961; Etzioni, 1961; Olson, 1965; for a more recent and interesting approach, see Zald and Jacobs, 1978). We feel that the list of dimensions described below will contribute to a fuller understanding of the role of sanctions in the regulatory process.

Although many factors are related to its calculation, the cost of a particular sanction is a key dimension of analysis. Costs may vary for the same sanction in different industries or for the same sanction applied to different members of the same industry. For example, the size of the institution has been demonstrated to have an effect on its probability of being sanctioned (Blondell and Meyer, 1973). The type of legitimacy underlying the sanction can be used to differentiate sanctions. The use of adverse publicity obviously depends on public support, whereas withholding of funds depends on juridicial legitimacy.

Like surveillance techniques, sanctions can vary by their range. Some sanctions can be used effectively only in certain industries or only with certain institutions while other sanctions can be broadly applied across industries and organizations. Two key distinctions in sanctions are their selectivity (Olson, 1965) and their divisibility (Gellhorn, 1973). Selectivity refers to the flexibility in applying the sanction while divisibility refers to the extent that different levels of the sanction can be activated.

Publicity may be a very flexible sanction, but it is not very divisible. The FDA was able to select only one soup company for adverse publicity (Bon Vivant), but it was unable to control the intensity (Bon Vivant went bankrupt for having fewer than ten cans of contaminated soup).

Another way to distinguish sanctions is in the orientation of the regulated to the sanction (Gamson, 1968). The use of sanctions considered legitimate by the industry produces a favorable orientation while the use of informal and coercive ones elicits an alienated orientation. Finally, sanctions can be classified according to the ease of mobilization (the liquidity issue). For instance, a court-ordered injunction is sometimes hard to procure but a leak to the press requires little advance preparation.

#### Compliance Readiness

Most of the previous conceptual clusters deal with dimensions of the regulatory process from the perspective of the regulatory agent. Because one of the essential assumptions underlying this analysis addresses the highly politicized nature of the regulatory process, we must also consider the compliance target as a fundamental factor in determining the course of regulation. As we have pointed out in earlier sections, regulation does not consist in the mere development, monitoring and sanctioning of performance norms by an authorized control agent. The target also attempts to define the exercise of social control in a way that is favorable to its continued, unconstrained viability. In other words, the targets of regulation are not passive objects but will actively mobilize resources to counter the power and influence of the regulatory agent. Social control is a reciprocal process in which each party maneuvers for positions of strength with regard to the other party.<sup>1</sup>

<sup>1</sup>See Gamson (1968) for a sociological description of the element of reciprocity involved in the social control relationship.

This description of the social control process implies that compliance of the target with the desires of the regulatory agent is problematical.<sup>2</sup> Compliance does occur but the dynamics of compliance are not as simple as may appear. We have termed the potential responsiveness of the target of social control as compliance readiness to indicate the active role which the industry member plays in the process.<sup>1</sup> Compliance has received much attention from political scientists (Becker and Farley, 1969) on a macro level and from social psychologists at the micro level (Milgram, 1973). Unfortunately, there have been few attempts to apply what is known about compliance to an organizational setting outside the formal political process (Supreme Court decisions and the relations between state, local, and federal governments are considered to fall within the formal political process). Some of the dimensions which are essential in performing such an analysis are described in the rest of this section.

Power and dependence are two complementary concepts which appear most appropriate for our analysis of the relationship between regulatory agent and the industry. Following Emerson's (1962) conception and Thompson's reformulation (1967), an organization is dependent on an element in its environment to the extent that the organization needs resources provided by the element and that the organization cannot obtain these resources from other elements. It follows then that the degree of dependence of the institution on the agent for resources is one dimension related to compliance readiness. Elements of dependence include money, legitimacy, operating licenses, certification, information, and freedom from surveillance.

Another dimension of compliance readiness is physical distance. Ceteris paribus, the closer the organization is to the regulatory agent the

<sup>1</sup>For the purposes of this analysis, we do not separate the readiness of the organization, which may be either strategic or economic-operational, from the readiness of organizational members, which may be psycho-motor.

more susceptible it is to surveillance and the application of sanctions. Since both surveillance and response to sanction attempts are costly for the organization, the rational organization will reduce the cost either by complying or making it more difficult for the regulatory agent to monitor its activities. Regulatory agents respond to the distance problem by opening branch offices.

Two interesting dimensions identified by a legal scholar (Johnson, 1969) in the study of Supreme Court decisions are the perceived locus of responsibility and the perceived rewards to negative reference groups. Johnson's analysis of a school district's response to the prayer decision revealed dual loyalties to the community in which the school was located and to the national institution (the Court). At the same time, schools which perceived that compliance would benefit groups with which the schools were in competition would be less likely to comply. A dimension related closely to perceived locus of responsibility is the degree of perceived legitimacy of the control agent (Weber, 1947). The greater legitimacy accorded to the regulatory agent by the compliance target, the less problematic is compliance.

Compliance always presents costs to the compliance target, because the organization must behave in ways in which it might not behave in the absence of the regulatory agent. Costs are essentially of two types: economic and ideological. Economic costs are those direct expenditures directly related to compliance, such as the purchase of special equipment, hiring and training of personnel, modification of installations, downtime, and so forth. Ideological costs come about whenever the target must shift its behavior to a pattern of behavior less consistent with its guiding principles and philosophy than the previous mode of behaving. The recent Supreme Court decision on the admission policies of private schools will represent, on the whole, much greater ideological than economic costs.

A final aspect of compliance readiness, and one related to costs, is the current capacity of the organization to comply. In some cases, the organization is simply not capable of bringing its behavior into compliance because doing so could possibly introduce survival issues for the organization. Organizations which are having difficulty assuring the viability of daily operations will be little inclined to monitor these activities for the sake of determining compliance. Survival, not compliance, is the dominant concern. Capacity becomes problematical not only when sanctions are applied to non-conformance but also when positive incentives impose strains on capacity. Vladeck (1976) discusses the situation when the addition of facilities, at little or no cost to the target, implies future maintenance costs for those facilities which the organization will be unable to bear.

Now that the framework for the analysis of regulatory settings has been fully explicated, the manuscript describes the application of that framework to concrete regulatory settings. The question which this research addresses is whether the use of this framework can improve our knowledge about regulations beyond what more limited and simplistic frameworks have offered. In order to test the utility of the analytic framework, the authors selected two different regulatory settings for study. Before moving directly to the case materials, a few words concerning the methodology would be in order.

The first methodological consideration was the selection of one or more agencies for analysis. While specific justification for each of the case studies can be found in Chapters III and IV, several general criteria guided case selections. First, we felt it was important to choose at least two agencies to demonstrate the applicability of the framework to different regulatory agencies. One of the serious shortcomings of much of the regulatory research literature is that studies are based on single-agency analyses.

Such research has led to a plethora of findings which are both difficult and frustrating to compare. If the framework can be successfully applied to at least two differing agencies it should provide a common framework for future regulatory research.

A second criterion was the selection of state agencies rather than the more frequently studied federal agencies. The concentration of research on the big six independent regulatory commissions (ICC, FTC, SEC, FDA, FPC, FAA) is somewhat unrepresentative since it has been estimated that over half of the administrative regulation is conducted by state-level agencies (Weidenbaum, 1975). Finally, we wanted to select agencies which differed according to the scope of regulation. Accordingly, one of the agencies, the Tennessee Division of Insurance, is concerned with regulations of a single industry (intra-industry regulation), while the second agency studied, the Tennessee Division of Boiler Inspection, is responsible for regulating the use of a particular product across all industries which utilize that product.

The material for the case studies was drawn from interviews with the top officials of each agency, secondary data was made available by the agencies (primarily annual reports for the years 1973, 1974, and 1975), and interviews with representatives of professional associations such as the American Society of Mechanical Engineers, the National Association of Insurance Commissioners, the Insurance Services Office, and the Tennessee Association of Life Underwriters. The case approach, although it suffers from the empirical rigor of economic analyses of regulation, captures much of the informal and complex nature of the regulation which these empirical analyses do not contain. The two case studies are presented serially in the next two chapters, followed by a brief summary of differences and similarities in Chapter V.

CHAPTER III  
INTRA-INDUSTRY REGULATION:  
THE TENNESSEE DIVISION OF INSURANCE

A Primer to Insurance Regulation

The present research focuses in part on insurance regulation. The choice seems justified on several grounds. First, the premiums, state tax revenues, and substantial investments by the insurance industry have significant economic impact on virtually all members and institutions in society. Second, insurance regulation is an under-investigated industry. With the exception of several studies to be discussed below, insurance research has focused on insurance-specific rather than regulatory issues. Third, regulation of the insurance industry is "clothed with a public interest." Individuals who buy insurance rely on the fact that the company will be there in the future to honor their claim. Therefore, by nature of the transaction, that is, pay now for a benefit in the future, someone must assure the individuals that his or her money is protected. In sociological terms, society through its control agents must regulate its insurance institution to assure that societal members are protected from force or fraud.

The insurance market is usually separated into two broad industry groups: the property and liability industry, which is the focus of this investigation, and the life insurance industry. Property and liability insurance typically includes fire and marine, extended coverage, automobile, homeowners, multiperil, and some types of accident and health insurance (Joskow, 1973: 378).

In addition to the reasons listed above, the study of insurance regulation seems particularly appropriate given the recent trends in the industry.

Among other things, observers point to the shortages of fire and theft insurance in many of the nation's cities, a situation which required intervention by the federal government. Similarly, there has been dissatisfaction with the

availability of auto insurance at desired coverage levels and reasonable rates through the voluntary insurance market. In addition, people have been concerned that the structure of insurance rates in many lines of insurance leads to levels of self-protection and self-insurance which are far from optimal. Finally, proposals for the implementation of no-fault auto insurance are intimately related to the structure and regulation of the insurance industry (Joskow, 1973: 376).

At this point it might be useful to discuss the evolution of insurance regulation. The discussion is brief and breaks the history into four periods: the beginning (1700-1860), the formative years (1861-1941), changing status (1944-1970), and current regulation (1971 to the present).<sup>1</sup>

Insurance regulation began early in the nineteenth century when states began to license insurance companies. In 1810, Pennsylvania, followed by Maryland and New York, passed acts prohibiting the writing of insurance by foreign companies. In 1814, New York passed a major piece of legislation establishing a process for handling the liquidation of insolvent companies, and the decade of the 1850s saw the beginning of specific insurance regulatory bodies at the state level.

The formative years of the insurance regulation movement were spearheaded by a college professor turned commissioner, named Elizur Wright. Wright's contributions to insurance regulation were the development of net valuation tables for maintaining adequate reserves, pressure for legislation, and influence on the newly-formed National Insurance Convention (NIC), an organization of state insurance officials. Many other developments also occurred during this period. For example, the NIC agreed to use a uniform annual statement blank, not to require companies to make deposits to protect policy-holders, and to develop a model insurance law, though its adoption was never a complete success. The most significant event of this growing period of state regulation was the 1869 United States Supreme Court decision

<sup>1</sup>Material for the history discussion relies heavily on Claude C. Lilly (1976). No further citations will be made.

in the case of Paul v. Virginia which ruled that insurance was not commerce, thereby placing insurance outside federal control and firmly in the hands of the several states:

On June 5, 1944, the Supreme Court reversed a 75-year-old precedent by ruling in the Southeastern Underwriters Association (SEUA) case that insurance was to be considered interstate commerce. This question of who should regulate insurance was not new. Several attempts had been made to strike down the Paul v. Virginia precedent. By now the NIC had evolved into the National Association of Insurance Commissioners (NAIC) and had begun to pressure the 79th Congress, which eventually passed the famous McCarran-Ferguson Act (Public Law 79-15) in 1945. The law gave insurance supervision back to the states but asserted that if the states failed to act, insurance regulation reverted to the Congress. Subsequently, several states toyed with all-industry bills to bring about uniform regulation; yet deviations, partial subscriberships, independent filings, and installment premium endorsements led to conflict and resistance between the regulators and the regulated.

Current insurance regulation has experienced some successes, as in the case of a generally accepted principle of accounting for stock life companies and the role of health maintenance organizations, and some areas that are still in turmoil, such as no-fault automobile coverage, national health insurance, and medical malpractice. Recently Senator Edward Brooke proposed legislation that would attempt to deal with the growing complaint of country-wide firms who find the variation in regulatory procedures between the states to be cumbersome. His idea was to set up a dual system of regulation whereby the larger companies could elect to submit to federal regulation and the smaller domestic or regional companies could remain under state jurisdiction. Finally, the current period is marked by a trend back to open competition in rate regulation. More and more states are loosening



their prior approval rating laws to permit the industry to use new rates and simply file them with the department for subsequent evaluation.

To conclude this discussion, it is important to explain what led the several states to become involved in insurance regulation in the first place. As the discussion below will show, regulation emerged as a mixture of concern for the public interest and pressure from the regulated industry.

In two volumes on monitoring competition, Hanson, et al. (1974) point out that, historically, fire insurance has followed a cyclical pattern. When losses were low and profits high, new insurers were attracted into the business. By contrast, over-confident writing and catastrophic fires ruined insurers and led to great losses to the unprotected policy-holders.

Competition, manifested by rate-cutting by agents or free movement within the industry, led companies to attempt to control the "evils" of competition. The first efforts to stabilize the industry were through agreements between the companies to form local associations in 1819. Yet during profitable periods, insurers violated their agreements by rate-cutting. The subsequent period, prior to the 1900s, saw local organizations give way to regional compacts to establish and enforce rates. Several factors again intervened to inhibit insurer's efforts at private control, such as member companies failing to consistently comply and non-members creating problems of competition. In the strong public movement to outlaw trust and restraints of trade of the late 1800s, federal legislation emerged to dissolve compacts. Yet the anti-compact legislation was ineffective in stemming the growth and influence of rating bureaus. In addition, rate-cutting, company insolvencies, and excessive agent commissions continued to plague the industry. Therefore, though rate regulation and other forms of insurance regulation occurred sporadically between the 1700s and 1900, by 1909 states began to enact regulatory laws to control excesses in the market place, and at the same time, to protect the public interest. Finally, the landmark German

Alliance Insurance Company case of 1914 upheld the power of Kansas commissioners to regulate rates, based on the argument that insurance is "affected with a public interest." Government regulation of insurance was here to stay.

This introduced the nature of insurance regulation. Focusing first on the reasons for selection, the discussion highlighted the appeal of this under-investigated setting. Then the discussion focused on the evolution of insurance regulation in the several states and concluded with an explanation of why the states became involved with insurance regulation in the first place. More specifically, it was argued that insurance regulation was the result of public and industry pressure to control the excesses in the market place. With this background in mind, the analysis now turns to the structural map of Tennessee insurance regulation.

#### A Structural Map of Tennessee Insurance Regulation

This section attempts to analyze state insurance regulation by focusing on the salient structural elements in Tennessee. Using information from interviews, secondary data, along with comparisons from other states, the discussion describes the major structural components that comprise the Tennessee "map" of social control. The discussion begins with a cursory description of the insurance industry in Tennessee and moves to contextual, intentional, and informal control agents.

As of 1974, there were 973 companies licensed to sell insurance in Tennessee. Of this total, 72 were domiciled in the state and 901 were foreign (i.e., headquartered in other states). Together the 973 companies paid 42 million dollars in various taxes to the state, making them the

second largest revenue producer in the state's budget.<sup>1</sup> Similar to Pennsylvania and in contrast to California, Tennessee has very few organizations involved in lobbying on regulatory and legislative issues. There is a company association, a consumer association, Independent Insurers, which represents independent agents, the Tennessee Association of Life Underwriters (TALU), the Tennessee Association of Life Insurance Companies, and the Life Underwriters Political Action Committee (LUPAC). In virtually all cases, the work of lobbying or influencing is not simply the function of a single paid staff member; rather, it involves standing committees and numerous association members who devote their time and energy to influence efforts, depending on the problem or issue at stake. In contrast to California which has more than fifteen different organizations representing insurance's interests (Serber, 1975), Tennessee has fewer organizations with more focused, concentrated activity.

In the words of Roy Bess, Director of the Insurance Division and Deputy Director of the Department of Insurance, "No industry is as heavily regulated as insurance." Pointing out that state regulation is closer to the people and avoids bureaucratic red tape, the Tennessee Department of Insurance reports they investigated 4,000 complaints in 1975 and returned over 2 1/2 million dollars to the consumer. On a budget of almost 1 million dollars, the Division regulates "the company and the agent," penetrating such areas as licensing, rate structure, policy forms, reserve requirements, advertising, investments, changes in personnel, and related business practices.

<sup>1</sup>The 23 Tennessee life companies paid \$4,787,487 in premium taxes with Provident Life and Accident paying the most, \$443,800 in taxes on \$25,360,042 in premiums received and National Life and Accident paying the second most, \$371,037. The tax is calculated on a basis of 1.75% for each dollar of premiums received. The largest out of state life company was Metropolitan Life which paid \$981,597 in premium taxes.

#### Contextual Elements

It has been argued that the regulatory machinery has not always been able to cope with the advanced technology of the large insurance companies. For example, the recent Equity scandal was in part based on an intricate set of computer printouts supporting false records and policies (WSJ, April 2, 1974: 3). Until recently, very few states have had people on their payrolls who knew anything about electronic processing; real experts move into private industry where they make the kind of salaries insurance departments cannot afford. The peril from the gap between company and agency technology is felt in Tennessee. Though the regulatory agency itself uses a computer, the relative newness of the technology, the paucity of trained staff, and the relative lack of statistical experience of the actuaries (compared to the large insurance companies) puts the insurance division at a distinct disadvantage in its regulatory efforts.

A dramatic example of the disadvantage which regulatory agencies, in general, experience relative to the private sector was revealed in the Equity insurance fraud (Stone, 1975). The company employed high skilled computer experts to program thousands of bogus policies. One reason the company avoided detection for so many months was that the California Department of Insurance could not pay for the equally trained manpower necessary to expose such fraud.

Despite these relative shortcomings, the belief system in Tennessee toward regulation is that it is "competent, fair, and nondiscriminatory." Lobbyists see the Department's regulatory performance as "the backbone of the industry, insuring economic solvency and responsibility." Representatives of independent agents and professional underwriters also extol the department citing integrity, fairness, and the fulfillment of the need for competent regulation in the public interest. Unlike Tennessee,

Pennsylvania has not always enjoyed such favorable attitudes regarding its regulatory division. When Denenberg was commissioner, industry spokesmen labelled him a brash, ego-maniac, who was out to breed divisiveness, distrust, and socialism in America's free enterprise system (Serber, 1975). Industry executives felt Denenberg's methods to protect the consumer damaged industry profits and created fears of increased governmental control over the methods of capital accumulation (Serber, 1975).

We should hasten to add, however, that Denenberg's adversarial stance towards the industry is not idiosyncratic. Commissioners in other states have also taken the "hard line." A recent example is Massachusetts' Commissioner James M. Stone (see Business Week, May 1, 1978: 66-72). In a landmark ruling, Stone prohibited insurance companies doing business in his state from using age, sex, and marital status classifications to justify pricing differences in auto insurance and, he reduced the rate differences among territories. When rates came down dramatically by 13%, Stone's action stunned insurers, who criticized him heavily for forcing older and wealthier suburbanites to "subsidize" younger, poorer urbanites. Surprisingly, the casualty insurers did not challenge Stone's ruling in court, however, possibly because they found no legal cracks in it.

In contrast to an "adversarial" posture, Tennessee insurers, in general, enjoy "cozy" informal relations between regulator and regulatee, that is, there are open communication channels, routine job cross-over, and petty favors. Although our research did not indicate it, other case studies have documented the wining and dining of insurance examiners, the provision of speech-writing services, gifts, favors, which lead to truck-size holes in the regulatory net. These special relationships which

are created by the exchange of service for support allow insurers to avoid government scrutiny altogether (WSJ, August 2, 1973: 14).

But in specific terms, the Tennessee Department has been known to "crack down." In one such case, insurance regulators have been trying to control the operation of a "marginal" domestic company that sells insurance to lower income minorities. Claiming fraud, mismanagement, and inadequate reserve levels, the department has waged a singular campaign to replace the management of the company and improve its operation. Through formal hearings and court action some progress has been made, but regulatory officials openly admit that ultimately they may have to take over the company.

More recently, the state department rejected a proposed 4.7% rate hike by State Farm Mutual Auto Insurance which would have meant an increase to Tennessee motorists of an additional \$3.6 million per year. In turning down the request, Insurance Commissioner Millard Oakley said the increase could not be justified on the basis of State Farm's experience in recent years and the firm's continuing profits in the state.

#### Intentional Elements

Though the legislative and judicial branches of state government play an important role in the regulation of insurance, this discussion will be limited to analysis of the State Department of Insurance: its structure, purpose, mode of operation, and perception from others.

In 1873, the Department of Insurance was separated from the offices of the State Treasurer and was provided with its own commissioner to be appointed by the Governor for a term of four years. Commissioned to administer the diverse activities for more than a score of regulatory boards and commissions, the Department operates in every county of the

state through its five major divisions: Administrative, Insurance, Fire Prevention, Loans and Securities, and Regulatory Board Division. Within the Division of Insurance, seventy-eight employees, distributed both in Nashville and in six regional offices, operate on a budget of close to one million dollars and produce almost 50 million dollars, second only to the Department of Revenue as a collector of taxes and fees (Tennessee Blue Book, 1975-76).

Under its current Commissioner Millard Oakley, and Insurance Division Director and Assistant Commissioner, Roy Bess, the department functions to inquire into violations of insurance laws, examine the financial conditions, affairs, and management practices of any company. If deviations or any irregularities are found, the department has the power to revoke or suspend the licenses of a company and/or its agents. (To keep these broad powers under control, the courts interpret activities within the context of national and state laws.) In addition to hearings for investigatory purposes, audits, license revocation or suspension, the department has the power to fine and impound documents. The department also checks on reserve requirements (a fundamental omission in the recent GEICO case, see Loomis, 1976), issues licenses to new companies and agents, sets investment percentages, proposes legislation regarding rates, regulations, and industry practices, regulates marketing, and responds to consumer complaints.

From all appearances, the mode of operation of the Division can be described as symbiotic. In other words, Bess, a veteran of more than 30 years in the department, works very closely with all elements of the industry by attending various meetings, holding special conferences, and stressing open, informal contacts. This mode of operation contrasts sharply with Denenberg's style of limited access, formalization, and

reduced communication (Serber, 1975). In Tennessee, the Division of Insurance prides itself on its legislative record (15 of 16 consumer-oriented bills submitted to the legislature were passed in 1975) its credibility, its integrity, and its ability to "sell" rulings in the best interests of the industry which also serve the consumer's interest. Bess argues that when there is some indication of difficulty with a company or agent, an informal chat will usually be sufficient to bring the violator into compliance. This is not to suggest that formal hearings, fines, or license suspensions do not occur. They do. Rather, the rule seems to be that there is a close working relationship between the department and the industry it regulates. Formal corrective measures seem to be the court of last resort.

While perceptions on the high level effectiveness of the department by the industry have been discussed above, the unanimity of praise the researchers encountered is intriguing. On the one hand, one could interpret this situation is operating because the division has been captured by the industry. That is, rather than depicting the department as an easy mark, industry spokesmen praise the division for its fairness, integrity, and concern with the public interest in order to keep a good thing going. In addition, the apparent lack of condemnation or criticism of the department might suggest that a low degree of threat is felt by the industry vis-a-vis the insurance department (the toothless tiger hypothesis).

Another explanation, however, is the symbiosis hypothesis. For example, assume that over the years, the major insurance companies and the department have established a relationship of interdependence based on reciprocal norms of exchange and influence that assure the mutual survival of each party. Assume further that the inevitable uncertainty surrounding an "investigation by academic researchers" threaten the

symbiotic balance of that relationship in ways much larger than the threat each participant might pose for each other. In an effort to protect the fabric of their long-standing arrangement, the industry praises the work of the department so as not to diminish the department's face in the eyes of researchers. Whereas Serber reports public and private criticism of Denenberg's muckraking tactics (aimed at securing his replacement), the interviews in Tennessee never imply that the industry desires change, reform, or a return to a happier era. Instead, the researchers experienced unanimous efforts to support the efficacy of the current relationship and maintain the status quo.

This is not to suggest that there was a universal appreciation of the presence of insurance regulation. Several company representatives were quick to criticize the costs of complying with regulations and information requests from the department. Others criticized the "prior approval" rating system, arguing that a more open rating system would decrease the costs of regulatory lag to the companies (and ultimately to the consumer). In all of this, however, the industry officials interviewed distinguished between the vagaries of regulation and the attributes of the Tennessee regulators. They contended that while the nature of regulation was a burden, the members of the department were "tough but fair" and therefore highly competent in their role.

#### Informal Control Agents

Informal control agents refer to those structures in an industry's environment not formally vested with social control function but who perform such functions in the process of carrying out their own activities. The paragraphs that follow discuss the informal role played by customers, professional associations, charismatic individuals, the media, and the Tennessee rating bureau (ISO).

It has been argued by Denenberg (1972) that a new approach to insurance regulation is required; one that returns control back to the consumer and the marketplace. In contrast to heightened consumer protection campaigns in Pennsylvania and other states, however, Tennessee consumers can be described as relatively passive in the pressure they exert on the industry. While there are some reports of increased buyer awareness and questioning of policies, by and large, consumers have not mobilized nor exerted focused pressure in the marketplace.

This situation may soon be reversed, however. At this writing, the Tennessee media reported a conference on Consumers and Life Insurance in Washington, D.C. The conference was sponsored by the National Consumers League and U.S. Office of Consumer Affairs, and brought together consumer and industry representatives for a frank exchange of views. Speakers highlighted their concerns regarding high pressure tactics, cost variability, increased promotion in the sale of life insurance to the elderly, and limitations on "wife" insurance. Since Tennessee sent representatives to the conference and reported it extensively in the media, it is conceivable that consumer pressure will increase in the state.

This prediction has been borne out in other states. A recent Business Week article (May 1, 1978: 67), for example, shows that as the recent rate increases have begun to be felt by consumers anti-insurance rallies have been held in Los Angeles and the Boston area. In various North Carolina cities the article describes how protestors have marched on Allstate counters at Sears with placards stating "You're in greedy hands with Allstate." It is conceivable, therefore, that this trend might be contagious.

Professional associations such as the TALU, and NALU, and Independent Insurers play important roles in the formulation of policies, rules, and regulations by the department. Close working relationships between the department and the associations suggest that symbiosis is indeed operating. For example, Bess reports that he obtains a good deal of his information from agents by attending their meetings, holding conferences, and speaking at their conventions. Such a "built in" surveillance system is crucial to his role, he contends. In exchange, professional associations feel the department is a friend of the agent, fair in prosecuting "twisting" practices (a technique whereby one agent illegally induces a customer to switch his insurance), and anxious to cooperate regarding the licensing of agents in the state.

This is not to imply that conflict between factions does not occur; in reality, it does. For example, recently the Tennessee Association of Life Underwriters attempted to upgrade the quality of insurance agents by stiffening the agent's licensing exam. This move was met with pressure from the larger companies who sponsor agents with only a high school education. The dispute became increasingly intense until the department intervened to propose that a salesman (representing the large companies) and an ordinary life agent (representing the TALU) design the examination together. In this way, the department preserved its relationship with the contending parties without alienating either in the process.

One of the most charismatic individuals in recent years, from the public's standpoint, was Commissioner Herb Denenberg of Pennsylvania. Appointed in 1970 to reform the industry, Denenberg enacted regulations which did not originate with the industry (as was the general practice), used the media and press to inform the public of insurance abuses, and

pursued a vigorous regulatory posture based on a tough consumer-oriented philosophy. Between 1970 and 1974, he employed what some critics called "headline hunting" in order to help the consumer protect himself from fraud and exorbitant prices (Denenberg, 1972). In contrast, Tennessee does not rely on charismatic authority. While the department claims it processed 4,000 complaints last year, little in the way of charismatic leadership emerged either in or out of state government to lead the public in the protection of its own interests.

This lack of a charismatic leader should not be surprising, however. Weber (1947) points out the ideal bureaucrat is the antithesis of the charismatic leader. Denenberg, as it happened, was from academia.

But for all his charisma in protecting the public interest, Denenberg and his tactics were generally rejected by Tennessee regulators and industry respondents. Their argument was that his behavior hurts the consumer in the long run by driving up the cost of doing business and encouraging retaliatory behavior by the industry. Far from promoting the "health of the industry" to insure a lack of future insolvencies, the belief in Tennessee was that a grand-standing muckraker inhibits the kind of negotiations that need to occur to solve complex problems.

Turning to the media, Gellhorn (1973) argues that often administrative agencies abuse the practice of "adverse publicity" in their efforts to coerce companies into compliance with state regulations. Exposes in Fortune (Loomis, 1976), muckraking in the Wall Street Journal, and speeches, press releases, and press conferences are evidence of this trend. Probably no one surpassed Denenberg in the strategic use of the media. His tactics included assuming an adversarial position vis-a-vis the industry, disassociating his administration from the past, and

informing the public of the abuses and unfair practices of the Pennsylvania insurance companies (Serber, 1975). In addition, a large scale program of publication and distribution of consumer information was responsible for the twenty-two different "shopper's guides" during Denenberg's tenure. Serber (1975) reports that public exposure of industry malpractice increased as Denenberg and his aides became particularly skillful at attracting radio, magazine, newspaper, and television interest.

In contrast to the over 2,000 press releases, seventy-five articles, and sixteen television appearances of the Denenberg administration, the Tennessee commission maintains a low profile characteristic of the conservative mannerisms and language of a typical state bureaucracy. Only a few pamphlets are available and no program existed (at the time of this research) for use of the media. In fact, Bess specifically eschews use of the media, claiming it is detrimental to the best interests of the industry. He contends it often results in the shaking of consumer confidence prematurely, thereby weakening a firm's ability to provide service in the future.

Turning to the controlling effect of rating bureaus, we noticed the Tennessee Department of Insurance frequently utilizes the services of rating bureaus. One such bureau, Insurance Services Offices (ISO) has helped the department establish satisfactory procedures and rate filings for the industry. Formed in 1971, ISO -- a national organization -- provides a full range of services to insurers, such as collecting statistics, classifying and processing data, doing actuarial research, making rates, providing statistical data for companies, etc. Servicing thirteen lines of insurance, ISO sees itself as a representative of the industry, a resource to the department, and a pool of expertise. In

reality, regional offices of ISO exert considerable influence on the department and various industry members. Since the department and the member companies are traditionally understaffed, ISO's technical resources and control of uncertainty (Crozier, 1964) makes it an informal control agent on both the department and the industry. This is especially true in prior-approval states such as Tennessee. We should explain why.

In the insurance industry, rate structures can be classified as open competition, use-and-file, or file-and-use (i.e., prior-approval). Open competition means that insurance companies may set their own rates with no required approval from the regulatory commission. "Use and file," on the other hand, means that insurance companies may change a rate, use it, but must file it with the supervisory commission for review (and possible refusal). "File and use" means that companies must file and obtain approval prior to using the new rate. The distinctions are important because industry representatives often push for open competition (Joskow, 1973) in an effort to reduce the regulatory lag (Baumol and Klevorick, 1970) that occurs when inflation outraces bureaucratic price adjustment. On the other hand, as one professional association spokesman pointed out, companies in prior-approval states anticipate inflation by building into their filings enough cushion to allow for regulatory lag.

A further theory on the control ISO can exert in prior-approval states argues that insurers, through their ISO representative, often flood the department with rate filings. This filing overflow creates a departmental backlog which then strongly supports the industry's claim for a change to use-and-file or open competition. Finally,

Joskow (1973) and Posner (1974) argue that the presence of powerful pricing bureaus (such as ISO) in open competition situations facilitates the process of cartelization by insuring benefits and lessening the costs of free-rider problems.

While the department, ISO, and large insurance companies can file independently of each other, in reality they do not often do so. Instead, ISO works closely with the department and the industry to supply auxiliary technical resources in exchange for cooperation on rate filings. Thus, while not formally a lobbying organization, nor a trade association, the Tennessee ISO enjoys considerable informal influence in its role as "representative" of a large number of "member" insurance companies. As a result, the local ISO office is propelled into a controlling role vis-a-vis the insurance industry.

This section has described briefly a structural map of Tennessee insurance regulation composed of contextual, structural, and informal control elements. In contrast to previous approaches which focus predominantly on the regulatory commission and/or the market forces as the sole control agents, the present approach proposes several complementary structures that participate simultaneously in the social control process. In the following section, we rely on seven dimensions of regulatory structure and process to analyze more specifically the nature of the regulatory relationship.

#### The Analytic Framework and Tennessee Insurance Regulation

In order to maintain the integrity of the conceptual framework, some of the material in this section will be repetitious from the previous section, "A Structural Map of Tennessee Insurance Regulation." As we have indicated before, repetition arises from the fact that the conceptual

clusters are neither completely distinct from each other nor from the notion of structural map. We have attempted to minimize this repetition by mentioning the central point and not developing it as fully as in the earlier part.

The material in this section is broken down into seven sub-sections, with each sub-section addressing the application of a conceptual cluster to the process of insurance regulation in Tennessee. Along with material relating directly to Tennessee, we have included wherever possible comparative material from other states.

#### Social Organization

The social organization refers to "the organization of those parts of the setting of an industry having direct control or ability to sanction industry, members or institutional components."<sup>1</sup> For the Tennessee insurance industry, the major agents of intentional control are: the Division of Insurance, the state legislature, the Congress, the state and federal judicial system, the Securities and Exchange Commission, and to a lesser degree, the Social Security Administration. The setting can be characterized as polyarchic with the Division of Insurance and the state legislature monopolizing the influence resources. Congress exercises considerable influence on a periodic basis, such as demanding that the states provide a specific type of coverage (no-fault), legislating national health system changes (Medicare), or underwriting insurance itself (ghetto coverage). The SEC exercises control in a well-defined area, but only in that area (variable life insurance reserve funds and reporting requirements). The Division of Insurance derives its control power primarily from its taxing and licensing functions, while the state

<sup>1</sup>See "The Analytic Dimensions of Regulation," p. \_\_\_\_.



legislature defines those areas which the DI is responsible for regulating (and occasionally the criteria).

The key area of linkage occurs between the DI and the state legislature. The Director of the Insurance Division is quite aware of those legislators who both understand the problems of the insurance industry and are also committed to regulation which is responsive to those problems.<sup>1</sup> The Director of Insurance provides and obtains information from state legislators on bills relevant to insurance policies and procedures. On a more concrete level, the DI exchanges a certain level of performance (fee and tax collection, examinations, decision on rate filings, legislative bill submission, surveillance, etc.) against legislative appropriations, e.g., 1.1 million dollars in the year ending December 31, 1974.

As with linkages, there also exists a critical or dominant area of inter-dependence, but unlike the former area, the dominant inter-dependence lies across state boundaries. The inter-dependence is created by the fact that companies operate across states, but are only examined in one state, the one in which the corporate headquarters are located. So if a company is found to be insolvent or bordering on insolvency, the effects spread into all the states in which policies have been written.

This is basically the situation with Government Employees Insurance Company (Loomis, 1976), a company domiciled and regulated in Washington, D.C. but with \$8.5 million of insurance written in Tennessee divided among 37,000 policy holders. If the District of Columbia Superintendent of Insurance is unable to put together a temporary holding action, the state will be responsible (in a technical, not legal sense) for making immediately

---

<sup>1</sup>An indication of the success with which this relationship is maintained is the DI's batting average in introducing regulatory legislation. In 1974, 15 of 16 bills drafted by the DI were passed by the Tennessee legislature.

available comparable coverage. Similar situations arise more frequently on a regional basis, so that (especially in the South where there is a wide range in regulatory competence) insurance commissions must be constantly informed of impending failures and the potential implications for their own states. The implications of this interdependence for the development of formal and informal communication networks is discussed in section five, "Surveillance Capacity."

The social organization of insurance regulation in Tennessee is relatively stable. There has been, however, an increasing concern that regulation on the state level is ineffective and that it must become largely or entirely the responsibility of the federal government. Discussion about the expanded role of federal regulation waxed especially strong when regulatory failures, e.g. insolvencies, occur. The Equity Funding scandal was just such an impetus. Enlarged federal control would drastically transform the regulatory context from polyarchic to almost purely hierarchic. In the meantime, the elements of instability arise from innovations in the industry (variable life policies coming under the purview of the SEC) and radical departures in state legislative policy (the introduction of no-fault, for example).

#### Norms

As indicated in "The Conceptual Framework," most of the norms, although not all, which will be considered in this analysis can be classified as laws. According to Roy Bess, Tennessee Director of Insurance, insurance is one of the most tightly regulated industries in the U.S. An array of regulations covers almost every aspect of insurance underwriting, from advertising to agent selection to agent-customer interaction. Given the wide range of normative coverage, it is perhaps fortunate that most of the norms for the industry are clear, technically visible, and subject to a relatively

high degree of consensus.

In Tennessee, as in most states, the regulations for insurance underwriting can be found in the State Annotated Code. The provisions are usually quite specific, as with reserve requirements, filing procedures, licensing, tax liabilities, and many other operational aspects. Tennessee is a "file and use" state which means that an insurance company, or a rating bureau representing a group of companies, must file desired rate changes and receive approval from the DI before putting the new rates into effect. "File and use" contrasts with "use and file" which means that companies may put the rates immediately into effect and hope that they will receive the requested increases. Whenever increases are partially or totally denied, the companies must return the additional premium to the policy holder. The least rate-regulated norm is "open competition" such as exists in Georgia and California, where no state approval of rate increases is required, and Adam Smith's invisible hand purportedly keeps unreasonable companies in line. The greatest degree of rate regulation is bureau-determined rates in which states such as North Carolina set the rates which the companies may charge for their policies.

In Tennessee, there appears to be a high level of consensus regarding insurance regulatory norms. The executive director of the largest rating bureau in the state, a highly regarded representative from Tennessee's charter life underwriters, and the major lobby organization for independent insurers in Tennessee all give the DI high marks for effective, industry-oriented regulation. Unfortunately, there was no organized consumer body to represent the customer's orientation to the level of service being delivered. One might, in such a case, consider the DI's good reputation as no more than a reflection of coziness between regulator and regulated (Stigler and Kolko's capture premise; see Serber, 1975, and the Wall Street Journal, June 5, 1974, for insurance data suggestive of the capture theory). Regard-

less of the reasons, there does appear to be, in the words of the Director of Insurance, "complete unity from the industry."

The source of norm authority is not problematic, since it obviously comes from state and federal legislative mandates. The mode of transmission is through legislative bills, published rates, open hearings, and informal, interpersonal channels. The norms seem to be applied fairly consistently across all companies. One easily identified exception is that newly chartered companies in Tennessee undergo a rigorous financial examination annually the first few years of operation while larger, more reputable companies are usually examined every three years. The focus of the norms is very wide, touching almost every aspect of industry functioning. In addition, the core of these norms is relatively stable. Instability arises on the fringe of the code with the enactment of consumer-related laws or the incursion of the federal government into areas formerly regulated by the states. There is no one particular area of intensity, but in general the more intense norms address financial reporting and operating and customer-servicing procedures.

One area of norms which has not been systematically addressed by this framework but which would be quite interesting would be norms which the industry expects the Division of Insurance to conform to. Such norms might include the manner of conducting audits (no advance warning vs. prior notice), adverse publicity and tolerance for adhering to reserve requirements. Intense consumer activist commissioners, such as Pennsylvania's Denenberg and Stone in Massachusetts, have clearly acted outside industry norms during their tenures.

#### Performance Curves

Given the data available in the Tennessee Annual Insurance Reports, very little interesting information could be assembled with regard to the insurance industry's performance. The reports are little more than compila-

tions of demographic data on size, location, type of line, and number of policies written. The only performance indicators were "net gain or loss from operations" for life companies, and the "ratio of losses incurred to premiums earned" for fire and casualty companies.

Even with this data, several problems must be resolved in order to come up with a good performance indicator. For example, should one use data from all insurance companies or just those domiciled in Tennessee? Should one consider all policies written or just those written in Tennessee? Should one use gross data, which is unadjusted for size or should there be some attempt at standardization? Should one consider all lines (life, health and accident, fire and casualty are the main ones) or should one select a specific line? Other sources of industry data must be available (Moody's or Best's Reports, trade association, or intra-departmental), and criteria must be developed for selecting among the various performance indicators.<sup>1</sup>

An example of national performance data which may prove interesting was reported recently in the Wall Street Journal (May 24, 1974). The National Association of Insurance Commissioners (NAIC) paid the McKinsey management consulting firm over \$400,000 to study insurance company failures. McKinsey reported that in the ten-year period 1964-1974, 101 life insurance insolvencies occurred.<sup>2</sup> A year earlier, the Wall Street Journal reported that there was 113 casualty insurer collapses between 1958 and 1972, but the journal lists no source for its data (Wall Street Journal, August 2, 1973).

<sup>1</sup>Since 1973, the NAIC has begun compiling profitability data for P&L companies on a state-wide basis. See Berger (1978) and Lowenthal (1978) for one of the first attempts to analyze statistically this data. See Plotkin (1969) for a coherent statement of P&L profitability compared with the performance of other industries.

<sup>2</sup>The NAIC is now collecting its own data for P&L insolvencies occurring after 1973. See Lowenthal (1978) for a potential use of this data.

As with norms, performance centers on the regulated but could equally well be directed to the regulator. For example, how successful are Insurance Departments in generating income for the state coffers? The Tennessee Division of Insurance collected \$42 million of fees and taxes in 1974<sup>1</sup> on a budget of \$1.1 million for a 3,800 percent return on investment (not bad by capital budgeting standards). Nationwide, insurance departments collected \$1.28 billion on outlays totalling less than \$60 million for a 2,200 percent return (Wall Street Journal, August 2, 1973). Other areas of performance could include number of complaints reviewed (4,000 in Tennessee for 1974), number of additional dollars returned to the consumer (\$2.5 million in Tennessee), amount of fines (\$27,000), or number of phone calls (80,000) as an indicator of effectiveness. Whatever the indicators of performance chosen, there remains much work to be done in the area.

#### Control Agents

The social organization of control agents has already been dealt with in earlier sections and chapters. This section addresses the nature of the relationship between control agents especially with regard to functional interdependence (a la Durkheim), complementarity (a la McKenzie), and stratification (a la Weber). Finally, some primarily demographic variables not covered earlier will also be presented.

Even though the Division of Insurance generates large sums of revenue, this money does not become a discretionary resource for the Division. Like all state bureaucracies, the DI must submit a budget to the legislature and, in turn, receives annual appropriations.

<sup>1</sup>A \$3.5 million increase over 1973. \$33 million resulted directly from premium taxes and the rest from miscellaneous fees.

Although we have no empirical data at this time, we assume that the revenue-generating capacity of the division provides it with some degree of clout relative to, say, hostile elements in the state legislature, congressional attempts to de-regulate insurance, the judicial system, and interference by other federal agencies.

Despite the contribution which the DI makes to the state's coffers and the concomitant power, the DI suffers identity problems (which lead to low status and low prestige) not experienced by other control agents. The prestige issue became apparent during the brief, but stormy, reign of Herbert Denenberg, the Pennsylvania Commissioner of Insurance from 1970-1974. Denenberg's Nader-like efforts in the field of insurance regulation prompted the Wall Street Journal to term the consumer advocate "an unlikely household word, a rarity among state officials, much less state insurance commissioners (February 1, 1972)." The Tennessee DI has only recently been able to establish its identity with the public, albeit in a relatively negative manner, when it went to court to commence bankruptcy proceedings against a local underwriter. The company had written over \$7 million dollars in policies which it was unable to assure financially.

For the most part, the efforts of insurance regulators in Tennessee are complementary and benefit from an explicit division of labor. The Congress and the state legislature make most of the laws, courts resolve conflict, the DI monitors and reviews performance in most areas, and the SEC has a well-specified piece of the turf (and no more, at least at this time). Consumers currently have no authorized representative to deal directly with the industry (other than the DI which might for some be suspect), and the existence of a consumer representative might introduce a source of conflict (with the DI).

The focus of each control agent is, therefore, fairly well defined, with little overlap in dominant attention. On the other hand, the GEICO fiasco has demonstrated that in some cases, such as surveillance, a little overlap in function might actually be desirable. Insurance companies do not go broke suddenly; failures result from a series of bad decisions made by management, changing economic conditions, or sloppy policy-writing criteria. In the GEICO case, the company had become increasingly lax in its underwriting policies. Rather than concentrating on the preferred customer, GEICO began accepting almost any employed individual. As a result, claims increased dramatically and cash reserves dropped below the required levels. This information was available not only to the District of Columbia's Department of Insurance, but also to the SEC, the NAIC, and probably various professional associations. Since the surveillance role is formally assigned to the department, however, other control agents did not provide the department the type of information which could have either prevented or certainly alleviated the GEICO collapse.<sup>1</sup>

The number of intentional control agents is small with intensity concentrated in the major actor, the Division of Insurance. The resources which have been allocated to the Division have been steadily increasing: \$48,000 in 1938, \$66,000 in 1945, \$101,000 in 1955 and \$1.1 million in 1974. This rise is generally consistent with the increase in receipts, going from \$1.7 million in 1930, to \$2.7 million in 1945 to \$7.1 million in 1955 and \$42 million in 1974.

---

<sup>1</sup>Since its close brush with bankruptcy, GEICO, under the close supervision of the District of Columbia's DI, has completely reversed its cash position and has once again become a profitable and sound underwriter.

Surveillance Capacity

While most of the norms by which insurance companies are regulated are technically visible, they are also technically complex and require trained personnel for most types of surveillance. Surveillance has been until recently an extremely labor-intensive technique. With the adaptation of high speed computer technology to insurance departments' needs for information, some of the surveillance burden has been shifted from the painstaking manual review of individual firm reports. Tennessee has not yet made any major investment in computer technology which may be one explanation for the placid relationship it maintains with most of the industry. An assumption underlying this perspective is that an increased surveillance capacity of any insurance regulator leads to increased costs to the regulated and therefore, extrapolating from Homans (1950), to decreased liking.

The extent to which the insurance industry is subject to regulations imposes a heavy surveillance burden on the DI. The Tennessee DI utilizes three primary surveillance strategies: consumer exposure, formal mechanisms, and informal contacts within the industry. First, the DI relies on the customer to report alleged infractions of insurance practices. A recent publication, "Insurance Facts for Tennesseans," provides compact buying-advice to the consumer and directs the unhappy customer to the Division of Insurance phone number or office address.<sup>1</sup> The Director of DI feels that the 80,000 received last year by the Department reflect an increased awareness by the consumer of what constitutes satisfactory service and what does not.

---

<sup>1</sup>Denenberg claims that 4 months after the appearance of his now classic "Shopper's Guide" nine of the ten gimmick policies listed in the booklet were withdrawn from the market (Denenberg, 1972).

To facilitate consumer surveillance, the DI opened up six branch offices across the state (Memphis, Jackson, Chattanooga, Knoxville, Johnson City and Cookeville). These regional offices were designed to increase the capability of the DI to respond more quickly to consumer complaints. Each office consists of one agent<sup>1</sup> responsible for logging complaints, conducting investigations, and reporting the results to the central office in Nashville. The agents do not, however, perform any of the financial review functions which are all completely reserved for the main office. The DI estimates<sup>2</sup> that it received 75-80 thousand telephone calls from disgruntled customers in 1974. Interestingly enough the DI does not tabulate complaints by company involved -- possible indicators of unfair or ineffective service -- but seems more concerned with maintaining an equitable case load (balance) for each agent. The individual responsible for consumer affairs did indicate that this area of reporting demonstrated an acute need for computer processing.

Formal mechanisms of surveillance focus on the financial strength of a company as reflected by direct audits made into the company's affairs or financial reports which the company must, by law, submit to the DI on an annual basis. In Tennessee, companies must be examined at least once every three years. The exam process may take as long as a year to complete. When the National Life Company was examined, it took fourteen staff members three weeks just to count the stock certificates in National Life's vault. To aid insurance departments in their review of annual reports, the NAIC has designed a computerized Fast-Track Warning System. The system computes fourteen ratios, all

---

<sup>1</sup>Except for the Memphis office which has two agents.

<sup>2</sup>Based on a two week sample.

of which are indicators of the health of the company. Any tests which are failed, i.e., ratios fall outside of pre-determined ranges, are reported to the departments, and companies which fail four or more tests are listed in a priority section.

Another formal surveillance support is the requirement that a company fined in a state must report that fine to all the states in which it is currently doing business. Some practices of the DI are not explicitly thought of as surveillance-oriented but constitute monitoring nevertheless. Such procedures as chartering companies, licensing agents, reviewing policy and personnel changes, all contribute to the surveillance capability of the DI. All of the formal techniques habitually utilized are considered legitimate by the industry.

The informal technique which the Director of the Division apparently relies on most heavily is the interpersonal grapevine at professional meetings. The NAIC holds national conventions twice a year while each of the six NAIC zones hold regional conventions on a semi-annual basis. In addition, each of the NAIC sub-committees also meet twice annually. A widely used informal technique is notice (phone) to the Director by a company who discovers malfeasance on the part of one of its agents (usually by a foreign company who is not willing to risk having its license suspended). A less orthodox form of informal surveillance was the recent planting of an undercover man in the Pennsylvania Life training program to reveal fraudulent claims made by door-to-door salesmen (Wall Street Journal, January 28, 1976). A final type of informal surveillance comes from agents' knowledge of state characteristics and economic conditions. For example, a company which relied heavily on automobile coverage in Massachusetts would be closely monitored because of the state's driving record (worst in the U.S.).

Another example is a Wisconsin company that specialized in credit life insurance for house trailers. Close attention to history would have indicated the danger of insuring this type of asset during a recession. The company ended up with 17 million dollars in acquired trailers and was placed into receivership.

Probably the greatest impediment to increased surveillance capacity for the Tennessee DI, then, is the failure to exploit computer technology more effectively and to acquire more highly trained auditing personnel.

#### Sanctions and Incentives

Basically, there are two kinds of sanctions which are utilized by a DI: formally mandated sanctions or informal sanctions. The Tennessee DI relies heavily on formal sanctions. These sanctions include denying a rate increase, suspending a firm or agent's license, de-licensing a firm's line of insurance, seeking a court order to terminate and place in receivership an insolvent firm, replacing the management of suspect companies, suspending advertising, imposing an outright monetary fine, or conducting a public hearing. The major informal sanctions, include lagging on rate requests and adverse publicity, both of which are used rarely in Tennessee.

In Tennessee, the DI usually attempts to contact directly the alleged deviant, advise him or her of the department's concern, and assess the response. Actually, this pre-contact phase is an informal component of the more formal component which would be initiated in the event of a non-compliant response. Tennessee has not made excessive use of fines as a sanction, having only assessed fines in the three previous years and not prior to that time.<sup>1</sup> This compares with a state like California which fined five title insurance companies a total of \$423,000 for

<sup>1</sup>\$6,700 in 1972, \$25,900 in 1973, and \$27,300 in 1974.

making rebates to real estate brokers (Wall Street Journal, August 22, 1974).

The ability of a department to fine a company depends on the nature of the statutes in the insurance code. In Tennessee there are only two main offenses for which fines can be imposed: filing either annual statements or premium taxes late. The first offense costs the company \$100 per day and the second, \$500 per day. Eastern U.S. codes are usually much more severe, providing fines for almost every kind of offense. The Tennessee DI does not tabulate fine offenders on an annual basis, i.e., who got fined how much during the year. Although the information is available, the department does not feel it is an important indicator of recurrent deviance.

The unparalleled master of the use of adverse publicity was undoubtedly Denenberg. He averaged one or two press releases a day during his tenure, appeared frequently on television, conducted wide-open public hearings, and showered the public with consumer information. Of course, Denenberg also earned the unstinting enmity of the entire insurance industry, not only in Pennsylvania but nationwide as well. The most noted state for time lag on rate filings is North Carolina which often takes as long as a year to make a decision. Tennessee is considered a good performer in this area, averaging between three to five months.<sup>1</sup>

It appears, then, that Tennessee has a penchant for using low-cost, wide-ranging, divisible, selective and legitimated sanctions. The sanctions are easily mobilized and the orientation of the regulated

---

<sup>1</sup>Based on conversation with local representatives of the Insurance Services Office, a rating bureau which frequently submits rate requests to the Tennessee DI.

toward their use is basically confident (Gamson, 1968). The preference for this type of sanctioning is intimately related to the compliance readiness of industry members, the topic dealt with in the final section.

#### Compliance Readiness

Based on our brief inquiry into insurance regulation in Tennessee, one would have to concur that the industry was characterized by a high degree of compliance readiness. The reader must understand that compliance-readiness may appear artificially bolstered if there is low surveillance and monitoring intensity and that, in general, compliance-readiness does not necessarily imply that the industry is compliant in all areas of performance.

The industry seems to believe that the DI has the interest of the industry at heart, and, therefore, there is a low ideological cost of compliance (Becker and Feeley, 1973). The economic cost of complying is ordinarily quite low. As long as the firm maintains adequate reserves, doesn't incur abnormal losses, doesn't write insurance for lines in which it is not licensed, has all its agents properly licensed, there are few economic barriers to compliance (assuming conformity with accepted industry practices). Distance then doesn't turn out to be problematical. The industry can endure proximity because it sustains a relatively low level of surveillance and monitoring. The control agent is perceived as legitimate, there are few substantial rewards to negative reference groups (consumer-action groups), and the industry perceives of its responsibility to maintain a close, collaborative relationship with the regulator.

The reader should recognize that we are not talking in causal terms. In other words, we do not wish to imply that the industry is compliant

because of a low level of sanctioning and surveillance. The relationship could just as well be the reverse. Given the theoretical underpinnings of this analysis, we would suggest that the relationship is reciprocal and mutually reinforcing. That is, the DI understands the basic needs of the industry and, within limits, responds to those needs with industry-oriented regulation. The industry appreciates what it terms as the "tough but fair" stance of the DI and cooperates heavily with the DI to prevent industry practices which would be harmful to the industry's public image. This degree of cooperation, in turn, reduces needs for DI surveillance and monitoring.

The industry is not, however, characterized by high levels of compliance-readiness in all states. The Pennsylvania insurance industry fought Denenberg on almost every single piece of legislation he introduced and tried intensively to have him removed from office (Serber, 1975). The Equity Funding Life Insurance Company, which was domiciled in Illinois and headquartered in California, demonstrated to what extent a company may go to escape compliance. Equity Life consistently falsified its records, claiming up to \$20 million in non-existing assets (Wall Street Journal, April 2, 1974). Other efforts to avoid compliance include the Bum Asset Swap, the Shell Game and the Surplus Slurp, all of which resemble Eric Berne routines, but in reality are complex strategies for attaining excessive underwriting profits by illegal means (Wall Street Journal, August 2, 1973).

Compliance-readiness, like most of the conceptual clusters in the framework, is a function of the particular dynamics operating in a given regulatory setting. In order to demonstrate that the framework is sensitive to changes in the regulatory setting, we will present in the

next chapter the Boiler Division Case. Following the second case, we will present a short discussion of the theoretical notions suggested by the application of the analytic framework.



CHAPTER IV

CROSS-INDUSTRY REGULATION:

THE TENNESSEE DIVISION OF BOILER INSPECTION

A Primer to Boiler Inspection

The second setting for the present study is the Tennessee Division of Boiler Inspection (DBI). We selected this agency for several reasons. First, comparisons between the Tennessee Division of Insurance and the Tennessee Division of Boiler Inspection, at first glance, appeared quite similar. Yet, preliminary data revealed that the two agencies actually differed quite significantly on a number of interesting dimensions to be discussed below. Thus, for its contrast value, the DBI seemed worthy of further exploration.

Next, the DBI was selected because the regulation of boilers and pressure vessels is as important to the public interest as the regulation of insurance but for different reasons. If regulatory failure (i.e., company insolvency) occurs with respect to insurance, policyholders may find themselves without financial security to pay off large hospital bills when illness strikes. It is important to note that insurance regulation cannot prevent such illnesses but it can provide financial protection if misfortune occurs. In contrast, regulatory failure (namely, explosions) of boilers or pressure vessels can result in death or permanent injury. Thus, the consequences of regulatory failure in the latter case is significant not only because it is preventative, but because it takes on life and death proportions.

Finally, the DBI was selected because the regulatory body does not account for as significant a percentage of the state's revenue as does the Division of Insurance. Total revenue for boiler inspection service and inspection certificates for the year 1974-75 was \$135,240.75. The authors

felt that this relatively low financial contribution to the state coffers might have implications for the way regulation in the DBI was carried out. For these three reasons, therefore, the analysis of the Division of Boiler Inspection seemed appropriate for this study.

To understand further the nature of boiler and pressure vessel regulation, it might be useful at this point to review briefly the history of boiler code adoption. The discussion will describe the early events of boiler inspection and then explain its adoption.<sup>1</sup>

It was not until steam pressures increased above that of atmosphere and generators became careless with safety valves and shells and settings that the ruptures and explosions of boilers in America and Europe began to cause public concern. In June, 1817, a Joint Committee of the Councils of the City of Philadelphia reported on the subject of steam boiler explosions on boats and recommended to the legislature of the state a law be passed requiring tests on the strength of boilers, the use of properly placed safety valves on them, and monthly inspections.

But the various reports on boiler explosions contained many strange and unproved theories. The early numbers of the Journal of the Franklin Institute around 1826, for example, cited the formation and explosion of hydrogen, flashing of water into steam at a higher pressure than that corresponding to the temperature of the water, and flashing into high-pressure steam when foaming water strikes overheated plates on a sudden reduction in steam pressure. The reasons were so different and debatable, moreover, that in May, 1830 the Board of Governors of the journal commissioned an investigation into the probable causes of these accidents.

Funded through a government grant and using experiments on twelve boilers, the committee discussed the causes of explosions under five general

<sup>1</sup>Material for this section relies on Arthur M. Greene, Jr. (1953), History of the ASME Boiler Code. No other citations will be made.

divisions: (1) undue pressure from gradual increase, (2) presence of unduly heated metal, (3) defects in construction, (4) carelessness or ignorance, and (5) collapse of the boiler from within. As a second part of their report, the investigators proposed (in 1836) a bill to the Congress for regulating boilers and engines of vessels propelled by steam. No congressional action was taken, however.

Subsequently, the 1840s, 50s, and 60s saw the continued existence of explosions and an increasing attempt to inspect and regulate pressure vessels. The most disastrous explosion was on the steamboat Sultana on the Mississippi River on April 27, 1865. It left New Orleans six days earlier with a passenger list and crew of 200. At Vicksburg it took on 2,000 federal soldiers just released from southern prison camps. Seven miles above Memphis, one boiler exploded leading to fire and the loss of 1,500 lives.

While various states were enacting legislation for the safe construction and inspection of boilers (Massachusetts and Ohio being among the leaders), it is important to note that by 1889, the American Boiler Manufacturers Association was also forming committees to raise and make uniform the standards of boiler manufacture and safe operation. For the next decade, however, the industry's attempts to attain uniformity were met with "some members of the Association who would not look beyond the interests of their companies." Parenthetically, this situation of free-riders, to use Olson's (1965) term, is similar to the early stages of insurance regulation.

The state laws of 1909 and 1911 setting up rules for the construction and operation of steam boilers in Massachusetts and Ohio were considered excellent in many respects, but they suffered in their appeal to other state boards because of their peculiar biases to the manufacturers in those states. By 1911, the various state laws relating to inspection differed significantly. Many, for example, required special licenses for inspection and non-installation provisions across state lines. Not only did the lack of uniformity

hamper regulatory efforts, but manufacturers themselves contended that uniform rules would eliminate the added cost of large inventories, make possible mass production, and lower the unit cost. It was clear that a uniform code was needed for the regulators and the industry as well.

In 1911, Col. E.D. Meier, President of the Heine Boiler Company, was elected President of the newly-formed American Society of Mechanical Engineers (ASME). Back in 1898, he endeavored to have the American Boiler Manufacturers Association approve a uniform set of standards, but without success. Upon taking office, he asked the Council of the ASME to approve the appointment of a Boiler Code Committee which would formulate specific standards for the construction of steam boilers and other vessels. After several preliminary reports, public hearings, and intense negotiations, the Committee prepared their final draft of a Code on December 15, 1914. At the Council meeting of March 12, 1915, the Council approved the code and the ASME Boiler Code was an official Society document. Furthermore, the Boiler Code Committee (the precursor to the National Board, which will be discussed below) was to administer the Code and was to provide interpretations, rulings, revisions, and additions where necessary.

At one of its later sessions in 1914, the question of forming an organization to bring the Code before the legislatures of states and municipalities was discussed. It was decided that the American Uniform Boiler Law Society be formed in 1916, under the leadership of Thomas E. Durban, to work with manufacturers and users of boilers, chambers of commerce, engineering societies, and other interested parties toward the introduction of uniform bills using the ASME Code as the minimum requirement.

As one of its first acts, the Society planned and conducted an American Uniform Boiler Code in Washington for state governors and city mayors. At that meeting, resolutions were unanimously passed by the twenty-two governors and four mayors present on the adoption of the standard ASME boiler code.

The years that followed -- all the way up to the present -- were filled with the elaboration and specification of the Code and its administration to keep up with the ever-changing technology. While these events are significant, we will forego their detailed discussion to focus instead on the antecedents of boiler regulation.

The discussion above attempted to show that the ASME Boiler Code was developed as a safety measure but also to furnish standards by which any state could be assured of the suitability of boilers for installation within its borders. At first glance, such goals appear to be in the public interest; that is, they seem to be geared toward the prevention of explosions. Yet the discussion also showed that the industry's desire for uniformity was also a source of the regulatory code and its administration. Manufacturers themselves wrote and adopted the Code to bring some degree of continuity to their chaotic national situation.

But the ASME Code should not be seen as in the boiler manufacturers' interest alone. To the contrary, state and municipal governments saw the adoption of the Code with legal sanctions as a way to protect the public interest from the menacing threat of boiler and pressure vessel explosions. Lacking technical expertise in the matter of boilers, the various governments used the professional society as the litmus test (i.e., does the boiler have the ASME Seal upon manufacture?) or can this boiler receive the stamp when evaluated by a nationally certified inspector? Thus, the cry of "capture," as in the insurance case, seems off the mark in this particular case.

This section introduced the nature of boiler and pressure vessel inspection. Focusing first on the reasons for selection, the discussion then turned to a brief analysis of the history of the ASME Boiler Code adoption. Finally, the discussion concluded with the observation that uniform boiler regulation resulted from simultaneous pressures to regulate

the likelihood of boiler explosions and to standardize the various elements in the boiler manufacturing industry. With this background in mind, the discussion now turns to a structural map of Tennessee boiler inspection.

#### A Structural Map of Tennessee Boiler Inspection

The boiler inspection case is similar to the insurance case in that both are within a state rather than a federal jurisdiction. The cases are different, on the other hand, in terms of sources of authority. Where the insurance department derives its legal and expert authority from the state legislature and its insurance subcommittee, the DBI derives its legal authority from the legislature and expertise from a trade association called the ASME which acts through its delegate, the National Board. Furthermore, where insurance regulation may vary widely across states, boiler inspection tends to be relatively uniform in "code states" and varied in the six non-code ("junk") states.<sup>1</sup> The purpose of this section is to analyze the important structural elements of boiler inspection in Tennessee. Using data from interviews and secondary material, the case outlines the major components that comprise the social control map, drawing comparisons to the insurance case wherever possible. The discussion begins with a description of contextual, then moves to intention, and informal social control agents.

#### Contextual Elements

The insurance case argued that a discrepancy often exists between the technological sophistication of the industry and that of the DI. In the boiler inspection case, the same condition seems to exist. For instance, there are constant changes in fabrication, materials, specifications, and appurtenances when it comes to pressure vessels. Secondly, where five years

<sup>1</sup>Even within code states, however, states may adopt only one or two of the sections (e.g., boiler fired, nuclear, or unfired). Tennessee has adopted all the codes and serves as the model for three other states.

ago the regulations pertaining to nuclear vessels were contained in two volumes, today they require nine volumes. Technology is advancing so rapidly that the Division of Boiler Inspection (DBI) must constantly train, and retrain, its personnel to prevent "technological lag." While "refresher" courses at prominent schools, such as Ohio State University, do help, the DBI feels the "pinch" in ways similar to the experience of insurance case. For example, boiler inspectors can work for either the department or private insurance companies. The DBI may invest three or four years training young staff for the National Board exam, only to watch the newly certified inspectors leave state employment for "greener pastures." The DBI just lost three nuclear specialists to insurance companies who also conduct ASME inspections.

Furthermore, the DBI seems caught in a dilemma where technology is concerned. Attempts to keep abreast of technological changes through training to upgrade certified examiners often conflicts with the need to carry our regulatory inspections. As one informant pointed out, the choice often boils down to "inspect" or "study."

The belief system in Tennessee seems to be primarily "safety conscious." But a DBI spokesman described the attitude around the state as "complacent." He pointed out that manufacturers of boilers and industrial customers know Tennessee is one of 44 code states and complies with National Board regulations (to be discussed below). He stated that compliance can be a two-edged sword, however. On the one hand, manufacturer and boiler-owner compliance lessens the number of accidents. On the other hand, a good record of accident prevention removes the visibility of and possible rationalization for continued support of the Division of Boiler Inspection. In addition, boiler owners tend to depend on the DBI or insurance inspector to make the owners do things they would not want to do to prolong the life of

their boilers (such as putting in an extra control to prevent super-heating). This has not always been the situation in Tennessee. Prior to 1954, municipalities regulated boilers and pressure vessels. In 1954, when state regulation began, the DBI was viewed as a "policy power." That is, rather than being perceived in today's education and safety functions, the DBI was resisted under the belief that any type of boiler regulation infringed on the rights of the boiler owner.

From all appearances, the relationship between the DBI and the industry is similar to that in the insurance case. There is the report of a "close working" relationship with the owners of the boilers and a broad representation from the industry on the state's Board of Boiler Rules (the highest state appeals body). In addition, the practice of certifying boilers that do not measure up to National Board standards (called "Tennessee Specials") is evidence of leeway and flexibility within the strict Board regulations. Like the insurance case, therefore, the belief system in Tennessee boiler inspection can be described as cooperative rather than adversarial and symbiotic rather than polarized.

#### Intentional Elements

The first paragraph of this section pointed out that the Tennessee Division of Boiler Inspection (DBI) derives part of its authority from a professional association. To understand this unique situation, the discussion moves to a description of the intentional elements of control, namely the ASME, National Board, licensed inspectors, DBI, and OSHA (personnel administering the Occupational Safety and Health Act).

The American Society of Mechanical Engineers (ASME) provides the umbrella of legitimacy to the state enforcement agencies. Through ASME's technical expertise and its delegates, the National Board of Boiler and Pressure Vessel Inspectors, Boiler and Pressure Vessel Code Committee, and

sub-committees, the society provides the direction and uniform regulation for 44 member states. To guide its members, the investigative arm of the ASME, called the National Board, is comprised of Boiler and Pressure Vessel Inspectors organized for the purpose of "promoting greater safety to life and property by securing concerted action and maintaining uniformity in the construction, installation, and inspection of boilers and other pressure vessels and their appurtenances and to secure interchangeability between political subdivisions of the United States and Provinces of Canada" (National Board Booklet, 1972:2).

With its central headquarters in Columbus, Ohio, the National Board accomplishes the following:

1. Uniform enforcement of boiler and pressure vessel safety laws, rules, and regulations.
2. Uniform approval of specific design and structural details of boilers and pressure vessels.
3. Uniform stamp to be placed on all boilers and pressure vessels in accordance with requirements.
4. Standard qualification and examinations of inspectors who enforce requirements of that code.
5. Data gathering useful to the members.

Through the laws of the member states, boilers and pressure vessels are stamped with an ASME symbol stamp which permits the boiler or vessel to be accepted across jurisdictional boundaries without difficulty. Since the various code states have adopted the National Board's regulations, they are assured that vessels so stamped have been inspected by a commissioned National Board inspector for adherence to the code. Therefore, while the National Board is not the legal authority of the DBI, in reality, both it and the ASME provide the rules, regulations, and laws which the code states carry out. This is not to say the regulations are uniform from code state to code state. There is some variation. Yet the major distinction occurs

between code and non-code states.

In addition to the ASME proper, the DBI has an advisory committee, comprised of representatives from the American Boiler Manufacturers' Association, American Welding Society, Insurance Services Office, and petroleum industries, which is deeply involved and highly interested in both boiler and pressure vessel safety and the activities of the National Board. Normally, we would classify these control agents as informal control agents, yet because they are a formal part of ASME's structure, they must be considered intentional in their "advisory" role.

National Board commissioned inspectors are highly qualified personnel, skilled in fabrication, installation, and maintenance of boiler and pressure vessels. After demonstrating their familiarity with various aspects of the ASME code by means of a written examination, candidates are eligible for a National Board commission. In addition, they must be employed by a state agency or an inspection agency authorized to insure and inspect boilers and pressure vessels. In other words, the National Board licenses inspectors in much the same way as the DI licenses insurance agents, requiring not only passage of a written exam but also "sponsorship" (i.e., employment) by either the DBI or an authorized, private boiler insurance company.

The Tennessee Division of Boiler Inspection and Codes is one of five divisions falling under the Tennessee Department of Labor. James G. Neely, Commissioner, heads up the Division of Administration, Division of Occupational Safety, Division of Boiler Inspection and Codes, Division of Workmen's Compensation, and Division of Mines (Tennessee Blue Book, 1976). The DBI, under Charles Allison, is responsible for the administration of Boiler and Unfired Pressure Vessel Inspection laws relative to design, construction, installation, operation, and maintenance. Interestingly enough, while virtually all Tennessee cities elected to drop their local ordinances in

1949 (the year Tennessee became a code state), the city of Memphis did not elect to come under state jurisdiction. In other words, Memphis still maintains its own regulatory body. The effect of this control at the local level, one spokesperson pointed out, increases the degree of agency politicization at the local level. In contrast, Georgia and Florida have adopted code regulations for their state but have not provided the state resources for enforcement. They have, in effect, left surveillance up to the insurance companies.

With branch offices in the five major cities of Tennessee<sup>1</sup>, the DBI issues "operating certificates" to commercial boiler owners for one year. Since inspections can be carried out by state or private insurance company inspectors, the 80,000 inspections last year were split about evenly between insurance inspectors and the nine DBI National Board approved inspectors. As in the insurance case, when deviations are found (such as the absence of an ASME stamp), informal discussions and documentation usually secure compliance. In the more difficult cases, a fine of \$250 per day and a misdemeanor charge could result.

OSHA is also an intentional control agent. In carrying out its function to insure safety in the workplace, OSHA personnel routinely check the presence of an ASME stamp on all boilers and pressure vessels. OSHA performs an inspection function for the DBI by notifying the department when firms are out of compliance. This is in contrast to the insurance case where there is an absence of intentional control agents other than the Division of Insurance. In this case, we also observe private insurance inspectors and OSHA personnel. Moreover, the fact that manufacturers have their boilers inspected and stamped at the moment of manufacture could lead one to argue that manufacturers are also their own control agent.

<sup>1</sup>Kingsport, Chattanooga, Jackson, Nashville, and Knoxville.

#### Informal Control Agents

If one defines the customer of the boiler regulation as children in schools, patients in hospitals, or employees in an industrial plant, then consumer action on the industry is absent. If one defines the consumer as the owner of the boiler, on the other hand, then informal control behavior varies. That is, on the one hand, owners apply for certification of their boilers immediately when moving into the state because Tennessee is a code state. On the other hand, some owners will consciously avoid registration when their boiler does not possess an ASME stamp. In either case, the degree of constraint posed by the owner of the boiler on the boiler manufacturing industry seems to be non-existent. Obviously, this is in contrast to states where consumer action is a real phenomenon. Yet as we saw with insurance, consumer activity in Tennessee was also characterized as relatively dormant, although the potential seems greater when it comes to insurance.

By contrast, distributors of boiler and pressure vessels can exert considerable control on the manufacturer. Anxious to sell ASME-stamped equipment, suppliers encourage manufacturers to make boilers according to National Board specifications so as to receive an ASME stamp directly and insure wider sales distribution.

Next, the contrast between the role of the media in the insurance case and in this one is striking. While the media will pick up boiler explosions when they occur, use of the media (e.g., adverse publicity) is, by and large, not practiced by the DBI. This is quite different from the Denenberg administration, yet similar to the low media profile maintained by the Tennessee Insurance Department.

Finally, as mentioned above, there are numerous professional associations and related industry associations which interact with the industry to control its behavior. Likewise, regulation appeals are heard by a

broadly-constituted Board of Boiler Rules, appointed by the Governor and comprised of representatives of boiler owners, manufacturers, boiler insurance companies, and mechanical engineers. This board endeavors to mediate the issues between regulator and regulated before any disputes reach the judicial level.

This section has briefly described the structural map of Tennessee boiler inspection. In contrast to the one intentional agent in insurance, boiler inspection has several intentional agents, which makes determining the role and effectiveness of the administrative agency somewhat difficult. Similar to the insurance case, however, the boiler inspection map contains informal control agents that impinge on boiler performance in varying degrees. It must be pointed out that these informal elements are slightly different. Where the insurance case alluded to the role of the consumer, charismatic personality, social movement, and media, the boiler inspection case notes their absence. In the remaining section of this chapter, we apply once again the analytic discussions of the framework to further our insight into the complex nature of regulatory relationships.

#### The Analytic Framework and Tennessee Boiler Inspection

The regulation of pressure vessels differs from that of insurance regulation in that regulatory activity affects firms in virtually every industrial sector in Tennessee. While insurance regulation targeted only those companies authorized to underwrite insurance policies, the Division of Boiler Inspection is responsible for the certification of every commercial pressure vessel, regardless of the owner's business (which may range from state government bureaus to tire manufacturers). The DBI is an extremely active agency, having conducted almost 10,000<sup>inspections</sup> in 1973, while operating on a budget one fifth the size of the Division of Insurance. Wherever possible, we have attempted to indicate contrasts and similarities between the DBI and

the DI<sup>1</sup>, in the course of applying the analytical framework to the DBI. At the conclusion of this chapter, an overall summary will be made to point out what, for us, seem to be the more significant comparisons.

#### The Social Organization

The array of control agents responsible in one way or another for the manufacture, operation, and repair of pressure vessels in Tennessee has already been identified in the structural map. Like the context of insurance regulation, boiler regulation occurs in a polyarchic setting. Within the state of Tennessee, the DBI is the principal jurisdictional authority of the National Board. As such, the DBI is empowered with the most comprehensive mandate for all phases of boiler manufacture and operation of all the control agents, while each of the other agents exercises regulatory influence in a specific well-defined phase. The division of labor of these agents is discussed more thoroughly in section four, "Control Agents," below.

A considerable degree of linkage exists between control agents. Unlike the insurance context, the laws and regulations to which pressure vessel operators and manufacturers must comply are established by the independent non-profit National Board in conjunction with a professional association (ASME). Neither the state legislature nor Congress plays any role in the formulation and enactment of these codes. The key linkages, therefore, can be found between the DBI, the National Board, and the ASME sub-committee on pressure vessels. A great deal of informal contact occurs among personnel representing these three agents at professional development seminars and refresher courses held at Ohio State University, the recognized leader in the dynamics of boiler engineering.

---

<sup>1</sup>Based on the annual reports of both agencies for the years 1973-75 and interviews with the directors and high-ranking staff members of each agency.

The dominant area of inter-dependence, contrary to that of insurance regulation, is intra-state rather than inter-state. That is, rather than dealing with foreign and domestic companies, as in the case of insurance, the DBI concentrates on pressure vessels owned and operated within Tennessee. Though boilers may come from out of state, certification must occur in Tennessee. This means that significant events (e.g., explosions) in other states, unlike insurance, are of no concern to the DBI. As will be made clearer in the section on division of labor, the actual agent of the National Board is a commissioned inspector, not the state agency per se. Commissioned inspectors are hired by the DBI or insurance companies which underwrite boiler insurance in Tennessee.<sup>1</sup> In order for the DBI to effectively perform its job, it must rely heavily for inspection service on the privately employed inspectors who usually perform nearly two thirds of all inspections made within the state. So while a failure of an out-of-state insurance company could have severe implications for Tennesseans and the DI, the existence of "junk" states, or unregulated states, has little or no effect in Tennessee (as long as all imported non-code pressure vessels, "Tennessee Specials," are appropriately licensed upon entry). The failure of a pressure vessel in a neighboring state -- and the subsequent property damage and bodily injury -- would likewise cause few repercussions in Tennessee.

At this point in time, the structural context of boiler regulation is much more stable than that of insurance regulation. Unlike the insurance context, there are no potential threats to the autonomy or jurisdiction of any particular agent. The only recent entrant to the field was OSHA which operates in a very complementary manner with the DBI. While state insurance

<sup>1</sup>In Tennessee, there are approximately 50 to 60 insurance companies that write boiler insurance.

regulators constantly face the possible de-regulation of some, if not all, of their functions by Congress, the DBI is comfortably nestled in a snug, tight, and well-defined context fairly well isolated from political pressure.

#### Norms

Like the insurance industry, manufacturers, operators, and repairers of boilers are in themselves subject to pervasive norms. Boiler manufacturers (60 in Tennessee in 1975) must comply with a stringent set of construction codes which include exact specifications and tolerances, material purchasing requirements, and precise operating procedures. The installation of boilers can only be performed by licensed personnel and every new installation must be certified by the DBI. The sale or transfer of second-hand boilers must also be recorded and approved by the DBI. Anything other than very routine maintenance and repair of boilers must be conducted by personnel who have been authorized by the DBI.

The norms which govern the manufacture and use of boilers are, as may be imagined, quite clear, although the degree of technical visibility varies, depending on the aspect being considered. For example, in the manufacture of boilers, trained personnel assess all aspects of the production process, some of which require the use of sophisticated technical equipment (tensile strength and heat tolerance), while others require only visual inspection (materials purchasing records and sales documents). The inspection of most operating boilers can be completed visually in no more than twenty minutes and as quickly as five minutes (as opposed to insurance audits which may require several person-months of effort). In addition to the clarity and visibility of the norms, there is a high degree of consensus surrounding the definition of these norms. In the U.S. there are only six states which do not conform to National Board requirements, while the remaining 44 states



have almost identical codes. Consensus among manufacturers regarding the legitimacy of DBI regulatory efforts is less problematical in National Board states because compliance is the condition of acquiring a license to operate. In fact, the trend is toward increasing the uniformity of vessel manufacture wherever possible. This situation is quite a contrast with insurance regulation in which consensus among control agents is much lower (states have their own individual codes, and there are disagreements over regulatory jurisdiction).<sup>1</sup>

The internalization of norm requirements can be viewed from two perspectives: historical and current. Historically (before 1954) norms were enforced in narrow geographical jurisdictions by metropolitan authority (Nashville, Chattanooga, Knoxville). To make the norms more uniform and enforceable, jurisdiction was shifted to the state level. Internalization of norms was not widespread nor was it very deep. As regulations became more and more pervasive and uniform, the degree of internalization became much greater, and both manufacturers and operators welcomed more readily regulatory efforts. Nowadays, the norms surrounding the manufacture of boilers are the most internalized while those focusing on maintenance and repair are the least internalized. Inspectors informally contribute to internalization in this latter area by attempting to educate boiler owners to the benefits of timely and authorized maintenance (a well maintained boiler can last as much as three times longer than a poorly maintained one).

The source of norm authority is, as indicated earlier, the National Board of Boiler and Pressure Vessel Inspectors and its authorized agents, who are employed either by the DBI or private insurance companies. The National Board, in turn, derives its legitimacy directly from the ASME Boiler Code Committee, which was formed as a result of a national boiler

---

<sup>1</sup>Although consensus among the industry within a given state is usually fairly high.

inspection movement by the Manufacturers' Association, boiler owners and users, engineering groups, boiler insurance companies, and others in 1910. At the state level, of course, the enforcement and sanction of norms is almost entirely the responsibility of the DBI.<sup>1</sup> Norms are transmitted in the form of published codes from the National Board to the DBI, whose responsibility it is to distribute them throughout the state (state laws 53-270-2724 of the Tennessee Code). The codes themselves are not at all stable and are very susceptible to technological change. The code had only one section in 1944 and now has 10 sections. The nuclear sections expanded from one sub-section six years ago to nine sub-sections in 1975. Constant new developments and innovations in materials and processes require new regulations, new code formulation and new training, all of which introduce a possibility of technological lag in boiler regulation.

Even more than with insurance regulation, the norms involved in boiler regulation are applied consistently to all members, regardless of experience or ownership. All manufacturers are inspected every three years (as with established insurance agencies), and all functioning boilers in the state are inspected every year. Perhaps the only inconsistency which exists is the scheduling of surprise visits (which occurs in cases of suspected non-compliance following a routine inspection and recommendation for repair or maintenance). It is difficult to pinpoint any area of intensity, since malfunction in any area could result in the loss of life. Probably surface conditions (visible corrosion) and the number of safety devices per boiler (as many as five separate ones) are the areas to which norms apply most intensely in the operation of boilers.

---

<sup>1</sup>The National Board conducts its own examinations of manufacturers and can suspend their certification independently of any state's action.

Performance Curves

Defining performance curves for manufacturers and operators of boilers proves even more difficult than for the insurance industry. The problems, however, are of a different order. The issue is not so much which indicator, among many, to choose; rather it is what indicator, if any, exists for boiler operation (the manufacturing side presents few conceptual or empirical difficulties). The population of boiler operators in Tennessee could probably be obtained from National Board statistics, but the universe, once identified, may prove intractable. The fact that boilers are used in such a diversity of organizations makes cross-comparisons either meaningless or uninterpretable. For example, it is difficult to evaluate the benefit of comparing school systems with tire manufacturers, both of which are large users of boilers. If one were to shift the focus to a boiler-related area of performance, the results might be equally dissatisfying. There was only \$285,000 worth of property damages in 1975<sup>1</sup> and no reported failures in the second quarter of 1976.

Perhaps an area of inquiry would be the performance curve of the regulatory agent, grouping the 44 DBIs from across the U.S. Then one could compare such indicators as number of fines, amount of fines, number of separate offenders, damages (property and bodily), inspections, suspensions, revocations, and the like. Once again, it appears as if the performance of the regulator demonstrates at least a comparable interest to that of the regulated. As was discovered in the insurance case, much additional work is required to understand the relationship between performance and regulation.

---

<sup>1</sup>\$28,000 in 1974 and \$118,000 in 1973.

Control Agents

Compared with the Division of Insurance, the Division of Boiler Inspection has only about one fifth the financial resources<sup>1</sup> of the total resources required to run the agency. However, the DBI generates about 80 percent so, unlike the DI, the DBI is not quite self-supporting. Inspection and certification fees are set by the state legislature (which must be paid either by the manufacturer or the operator), but the DBI's assistant director mentioned that the agency did not want to impose undue hardship on small business firms (dry cleaners, for example) by substantially raising its rates.<sup>2</sup> The area in which the DBI feels the greatest financial pinch is in the addition of an in-house trainer and professional development funds for its inspection staff. These two areas cannot be covered by field activities and must be underwritten by legislative appropriation. The DBI does receive some indirect subsidy in this area from the National Board<sup>3</sup> who either provides (disseminates) training materials to the DBI or shares the participant expenses in a training event. Although the DBI is somewhat constrained in the area of liquid financial resources, it can rely heavily for both material and non-material resources on the National Board, ASME, a prestigious professional association, and Ohio State University's Department of Mechanical Engineering, one of the leading research and development laboratories in the field of pressure vessels.

The relationship between the control agents implies a division of

---

<sup>1</sup>\$200,000 v. \$1.1 million.

<sup>2</sup>Major rate increases were passed in 1972 and 1973, but the impact of these increases was felt principally by manufacturers.

<sup>3</sup>The National Board is funded by the financial reports from Manufacturer Data Reports; that is, the Board charges manufacturers on the basis of size of boiler for the initial inspection and stamp at the time of production.

labor which is more real than articulated. For instance, the National Board formulates the model code (the NAIC or a particular state legislature performs this task in the insurance industry); the ASME lends professional support and prestige (cf. NALU for instance); OSU conducts research and education of DBI; insurance inspectors, OSHA, contractors, and facilities inspectors all conduct surveillance; and the DBI and the National Board enforce the regulations (the DBI by fines, suspensions or imprisonment and the National Board by revocation). The division of labor appears to be quite complementary with little overlap (the overlap which does occur is in the area of surveillance and, given the low level of resources currently available, is probably functional). An example of DOL in the area of surveillance occurs between the DBI and private insurance underwriters. The DBI inspects only those boilers not inspected by the insurance inspectors (or approximately one third of the total). Since Tennessee is a "code state," all pressure boilers must be inspected by the DBI or insurance inspectors and receive an ASME stamp.

Among the control agents in the context of boiler manufacturers, one would have to conclude that the National Board is the most powerful, the ASME is the most prestigious, and status is probably a toss-up between the two. The DBI, like the DI, only becomes visible when a failure of regulation occurs. As mentioned above, the context is fairly stable, with a limited number of control agents and no foreseeable change in the near future. Instability, if expected, could be produced by a technological change which would cause either the manufacturer or operation of pressure vessels to become the concern of a previously unactivated environmental element.

#### Surveillance Capacity

Although the DBI has only eight or nine full-time inspectors for over 80,000 new and used commercial boilers, the agency extends its surveillance capacity through numerous strategies. First, the DBI shares official inspection duties with board-commissioned inspectors working for private insurance companies and also with the National Board itself. The National Board helps constitute multi-specialist teams capable of conducting a thorough inspection of a boiler manufacturer. The DBI and the insurance inspectors concentrate on the annual inspection of all currently operating boilers. The DBI handles all boilers imported into the state or boilers transferred from one owner to another.

Second, the National Board and the DBI have facilitated the monitoring task through symbolization and certification procedures. The National Board requires that every boiler which conforms to its code be clearly marked with the appropriate ASME symbol. In addition, the DBI requires that the operating permit for the current year be prominently displayed in the operating site (approximately 28,000 issued each year from 1973 to 1978). Both of these requirements provide an easy mechanism by which surveillance can be delegated to untrained or unauthorized inspection personnel. A person both knowledgeable of building codes and provided with access to boiler operating sites can immediately ascertain if the operator is in compliance. Some of these personnel are OSHA inspectors, facility inspectors (fire and electric), construction foremen, and field engineers. The DBI does increase the capacity of unauthorized personnel by giving them on-the-job training. The DBI arranges in-service classes for janitors, custodians, and "sanitation engineers" so that they can quickly observe and report dangerous or hazardous conditions.

Third, the DBI relies on informal notification of boilers which are

out of compliance. This situation apparently occurs in areas of intense competition among small businesses, where even short interruptions in service can be devastating. For example, dry cleaners make heavy use of boilers and are also very competitive. An informant related how a firm can confer competitive benefits on itself by reporting the non-compliance of a neighboring dry cleaner (presumably then the competitor must discontinue operations until either an inspection is performed or compliance is obtained).

Fourth, the DBI, similar to the DI, has increased its capacity for surveillance by decentralizing its operations to regional offices.<sup>1</sup> The central office, located in Nashville, contains the records of all the boilers in the state and verifies that each region has conducted inspection of boilers for which it is responsible. The inspection technology itself is relatively uncomplicated for the trained observer and almost totally labor intensive. In fact, inspectors are often told to stretch out their visits so the clients believe they are getting their money's worth.

The DBI has responded, therefore, to the increased need for surveillance capacity (80,000 units vs. the DI's 973 units) by developing additional monitoring and surveillance techniques, none of which involve increasing its basic core capacity.

#### Sanctions and Incentives

The range of sanctions employed by the DBI to ensure compliance is probably not as wide as those utilized in the insurance industry nor do sanctions appear to be as frequently invoked.<sup>2</sup> Basically, the DBI can

<sup>1</sup>There are regional offices in Chattanooga, Knoxville, Kingsport, and Jackson. There is an additional office in Memphis, although this city has its own boiler act and is responsible for surveillance.

<sup>2</sup>This is a subjective assessment based on informants who claim that informal discussions and periodic certification lessens the need for the use of sanctions. Only 45 formal letters on non-compliance were issued in 1973, 57 in 1974, and 42 in 1975. In 1977, the Commissioner of Labor

either fail to issue or renew an operating permit or can suspend or revoke a current permit. Operating a boiler without a valid permit is punishable by a \$250 fine or not more than one year's imprisonment. Each day's operation is considered a separate offense, so the penalty could be quite severe, especially in the case of small firms, i.e., those most likely to be unwilling to pay the inspection fee or the higher cost of a code-conforming boiler.

The cost of invoking a sanction is, then, quite low, the legitimacy usually high, and the range of the sanction statewide. The sanction is both divisible and selective, i.e., it can be applied in amounts commensurate with the offense and only to those responsible for the infraction. The only issue of legitimacy seems to arise when rural firms are required to obtain authorized repair services -- often 50 to 100 miles away -- rather than using the local garage welder. The orientation of the regulated toward the regulators appears to be confident, at least among those most capable of affording the cost of compliance, shifting to alienative for those least able to afford it. The effect of cost of compliance on orientation conveniently introduces the final section of this chapter, compliance readiness.

#### Compliance Readiness

Compliance readiness is difficult to assess in the context of boiler manufacture and operation. Although it appears to be quite high (few reported accidents), damage totals may be an inappropriate indicator. Even consideration of fines, suspensions, and revocations may be misleading indicators, because there is no way of knowing the number of unlicensed boilers or unlicensed repairers currently functioning within the state. They become known only through betrayal or through a reported accident (the

announced plans for stepped-up enforcement of non-compliers, when only 51 of 158 violators had not responded to out-of-compliance ratification (Nashville Tennessean, August 23, 1977, p. 12).

DBI conducts a thorough investigation of every reported boiler accident regardless of the degree of damage). Based on the available information, however, it is possible to conjecture about the state of compliance readiness.

The key dimension in the explanation of compliance readiness seems to be the economic cost of compliance (versus the ideological cost of compliance in many regulatory settings, in which the regulated feel the regulatory effort is illegitimate, inappropriate, or inefficient). Compliance bears a definite economic cost, and that cost falls most heavily on a specific segment of boiler operators. The components of the cost are the inspection and certification fees, the installation and repair of boilers by certified or authorized personnel (higher than more accessible, less skilled personnel), and the price of code boilers (costs are lower for non-code boilers which are not inspected, and therefore have no cost passed on to the customer). The segment of operators for whom the economic cost represents a significant component of overhead are rural, isolated, or small, highly competitive urban firms.

In addition to the economic cost, the organizational capacity of this segment of commercial establishments, particularly the rural ones, for complying may be quite low. Obtaining the services of authorized personnel for installation and repair may be practically impossible for isolated operators. The implication here is that compliance readiness may be a function of size, setting, distance, and environment rather than the more formal factors suggested by legal or economic analysis, though such an assertion is merely conjecture at this time.

For the other segment of commercial operators -- urban, large, moderately competitive -- dimensions such as dependence, distance, perceived locus of responsibility, and perceived legitimacy provide better handles than pure cost and responsive capacity. These establishments are very accessible

to inspection and thus dependent on control agents for certification.<sup>1</sup> In addition, urban settings, particularly large metropolitan ones, have been exposed to regulatory activity for a longer period of time and are more likely to perceive of inspection as legitimate and the firm as being responsible to the community to comply (to avoid loss of life and property). Ideological cost is, therefore, low. These dimensions, coupled with economic cost and organizational capacity, provide very suggestive explanations for the compliance readiness of different segments of boiler operators. The case for insurance regulation did not imply similar segmental responses. On the contrary, the large firm was less likely to be monitored and more capable of avoiding regulatory pressure or sanction, at least in the short run.

In the concluding chapter of this manuscript, the distinctive dimensions of the two case studies will be summarized. The objective of this summary is to demonstrate the utility of the conceptual framework for analyzing regulatory settings. The application of this framework to two state regulatory agencies has been suggestive of some theoretical notions about the behavior of regulatory bureaus generally. These notions are presented in the second half of the final chapter.

---

<sup>1</sup>A contractor will not get paid for a newly installed facility until obtaining valid operating permits for the boilers.

CHAPTER V

TOWARDS AN INTEGRATED PERSPECTIVE OF REGULATION

Summary of the Case Studies

This section is intended as a brief summary of the similarities and contrasts of the two cases and as a review of both the utility and the shortcomings of the analytical framework. Figure One below presents in a schematic manner a comparison of the two regulatory agencies for each of the conceptual clusters used in this analysis.

(Figure One about here)

One can immediately see the structural similarities between the two agencies. Both are revenue-producing (although only the DI is self-sufficient), and both operate in polyarchic contexts. Despite income-generating capabilities, both agencies suffer from identity and status problems. Outside the immediate targets of their regulatory activities, both agencies are largely invisible to the public.<sup>1</sup> The DI is beginning to achieve some public recognition through its consumer education programs. The DBI will probably continue to maintain a low profile -- unless a series of boiler accidents arouses public consciousness. In both contexts, the agencies are overshadowed by more prestigious control agents. The SEC, the Congress or the state legislature for the DI and the ASME and the National Board for the DBI all have higher status even though they are less active than the state regulatory agencies. The major difference in contexts is that, at this time, the context of the DI is very unstable, while that of the DBI is very stable. The DI is threatened with a decrease in

---

<sup>1</sup>Both agencies become visible at times of regulatory failure, i.e., financial failure or consumer fraud in the case of insurance and property or personal injury in the case of boiler inspection.

autonomy and influence by the deregulation of insurance at the state level. Further fiascos (cf. GEICO) and scandals (cf. Equity) could generate the critical mass of dissatisfaction necessary for such a change.

The normative focus, scope, clarity, and visibility of agency regulation is quite similar in each case. The norms focus on all phases of operations, are quite clear and technically visible to the trained observer. A higher degree of consensus seems to exist for insurance regulations, while the DBI seems more consistent in application. This is not surprising, since the DI deals with a few giants in the industry and a host of medium-to-small outfits. The dependence of the public on the giants means that it is unlikely that one is as likely to be closely monitored as a smaller one with less social power. The DBI deals with everyone, however, and it would be much more difficult to mobilize an industry (the DBI faces almost pure market conditions with regard to the fragmentation of operator influence).<sup>1</sup>

Both agencies benefit from a division of labor with regard to the problem of intentional control. Probably the DBI handles more effectively the division of labor than the DI which, it appears, confronts a lesser degree of goal compatibility. The DOL for insurance regulation is, ironically perhaps, more explicit than for boiler operation. In insurance, the courts, the Congress, the state legislature, and the DI all have specific responsibilities, articulated in formal mandates. The DBI, on the other hand, is nestled neatly into a well-defined network (almost a hierarchy) of control agents where mandates need not be made explicit. The orientation seems to be integrative in the latter case and distributive (Walton and McKersie, 1965) in the former case.

---

<sup>1</sup>See Olson's (1965) discussion of the difficulty in organizing industrial interests among industries with many members.

Surveillance capacity is a critical issue for both agencies, since there are many units to monitor and few resources to accomplish the monitoring task. The surveillance problem is aggravated by the fact that surveillance is labor-intensive and requires technically trained personnel. The DI seems to have been less effective in developing alternative strategies and confronting the need for incremental capacity than the DBI (although there are some basic similarities in strategies). Both agencies delegate surveillance to others and decentralize surveillance to branch offices. The DBI has enlisted a far wider spectrum of non-customer monitors than has the DI. The DI consumer education program may help to close the gap in this area, as would greater exploitation of computer technology.

One of the most common criticisms of regulatory agencies is that they do not have adequate or easily invoked sanctions to ensure compliance. This does not seem to be the case in the DBI or the DI. Sanctions are divisible and selective, relatively easy to activate and applicable across the whole range of units regulated. The DI seems much more limited in its statutory fining authority but has much broader authority to intervene in a violator's operations and to shut down definitively these operations. In the case of both insurance regulation and boiler operation, the powerful informal sanction of consumer awareness and adverse publicity is rarely used, nor are the formal sanctions frequently invoked. At this stage of the analysis, we are unable to interpret the reasons for such a low level of sanctioning activity. On the one hand, there could be little cause for sanction (high compliance readiness) or sanctioning may incur costs to the agency which are not readily apparent.

Compliance-readiness in the two settings presents one of the most interesting comparisons of all the conceptual clusters. While compliance-readiness appears quite high in the insurance industry, it is quite mixed

among different segments of boiler users, compliance-readiness being largely a function of economic cost.

The main reason for the presentation of cases was to test the utility of the conceptual framework. Now we must turn to that issue. We believe, first of all, that the utility of our sociological framework has been more than adequately demonstrated. The concepts and conceptual clusters have provided a wide variety of analytical handles by which the regulatory process can be meaningfully understood. Most of the dimensions suggested ways of looking at the regulatory process that have not been amplified in the literature. The sociological perspective employed in this analysis focuses more clearly than in previous research on the wide variety of control agents implicated in the regulatory process, the differential power which these agents exert on the regulated industry, the emergence of norms, surveillance, and sanction processes, and the factors involved in compliance-readiness. We found that these dimensions could be applied in differing settings and that, in most instances, the phenomenon observed lent itself easily to that application. The framework could be more valuable, however, if it could be suggestive of a theoretical model of regulatory behavior. We believe, in fact, that this is true, and we discuss such a model in the next section.

#### A Complex Organization Model of Regulatory Behavior

In an earlier section, we argued for a sociological approach to the issue of regulation in modern, democratic society. The legal profession, economists, and political scientists have all addressed important questions posed by the existence of regulatory bureaus, but few have addressed more than a small fraction of the range of regulatory phenomena. In addition, a majority of studies have focused on large federal, independent regulatory commissions as the unit of analysis, and have overlooked a wide variety of

state regulatory bodies.

We believe that our sociological perspective provides an important contribution to an understanding of the relationship between regulating institutions and regulated institutions at whatever level social control is exercised.

In this concluding section, we attempt to lay out in a systematic manner some theoretical notions for the behavior of regulatory bureaux which have been suggested by analysis. Readers familiar with the literature on complex organizations will recognize that we have drawn liberally from Selznick (1949), March and Simon (1958), Cyert and March (1963), James D. Thompson (1958, 1967), and Anthony Downs (1966). Our theoretical perspective is expressed in a series of axioms and theorems, proceeding from some elementary notions of complex organization to what we believe are the underlying dynamics of the regulatory process. In some respects, the series of statements resembles a Guttman scale. If the reader agrees with any statement listed, he or she should be able to agree with all previous statements. What may be termed the complex organization approach to regulatory behavior, then, is laid out below:

1. Intentional control agents are complex organizations.
2. Complex organizations are embedded in environments containing multiple elements.
3. Environmental elements vary in the degree of power vis-a-vis the organization.
4. Multiple elements that vary in power pose contingencies and constraints for the complex organization.
5. Contingencies and constraints create uncertainty for the organization.
6. Complex organizations are subject to norms of rationality.
7. Rationality suggests that complex organizations will attempt to increase the degree of certainty in their environment and provide for their own perpetuation.
8. Therefore, intentional control agents viewed as complex organizations can be conceptualized as having a life of their own, independent of any

one force in their environment yet subject to many forces, operating under norms of rationality, that seek to reduce uncertainty posed by multiple contingencies and constraints of elements that vary in the degree of power they have vis-a-vis the organization.

9. Complex organizations deal with contingencies and constraints by attempting to decrease their dependence and increase their power.
10. A decrease of dependence and an increase in power can be accomplished via a political exchange process.
11. The political exchange process between contending parties implies compromise that attempts to minimize the degree of alienation either party experiences.
12. Side payments to contending parties is the principle mechanism in the political exchange process.
13. The extent to which one benefits from side payments affects the perception one has regarding the efficiency of control agent behavior.
14. Side payments vary with the severity of potential constraint on the complex organization.
15. Therefore, administration of side payments will vary and be perceived as being both efficient and inefficient for the regulatory process.
16. Social, economic, and technological (SET) change require adaptation by the complex organization.
17. Complex organizations are viable to the extent that they are capable of adapting to change.
18. Control agents who are flexible in their ability to adapt to SET change will endure.
19. Viable control agents distribute side payments to various sectors of society so as to enable those sectors to adapt to SET change.
20. Viable control agents contribute to the functioning of society.
21. Therefore, to understand the social control of institutions, one must study the exchange processes by which control agents link target institutions with society at large under conditions of rapid SET change.

We believe that this approach to regulation responds to two fundamental contradictions in the literature on regulation which other disciplines have been unsuccessful in resolving. First, how does one explain the enduring persistence of regulation when its behavior has been demonstrated as inefficient? Second, how does one explain the manipulation of regulatory institutions through political processes when the underlying premise of their



creation is supposed to be political independence? Our two case studies have demonstrated that regulation is functional and, in the settings studied, can be relatively effective (see Lowenthal, 1978, for a detailed empirical investigation of effectiveness in insurance regulation). That is, someone is always benefitting from regulations and, as a result, provides the regulatory institution with the resources required for its survival and viability. When adequate benefits are not provided, society will condemn the continued existence of the regulatory agent, or any organization for that matter. It is the task of the regulatory institution to understand the realities of the environment in which it is embedded and to adopt activities to bring it to terms with that environment. The framework, therefore, subsumes -- but does not ignore -- the tenets of capture, public interest, and economic theories and provides the integrating mechanism by which these points of view can be acceptable.

We realize, of course, that both the framework and the case studies are exploratory in nature and will require much further elaboration before displacing capture, public interest, or economic theories as the dominant models of regulatory behavior. Regulatory research is an important need of new models, however, because the current models are narrowly focused and limited in their explanatory ability. Yet the issues which regulation poses for a democratic society are pressing, and they demand a more comprehensive response. In our future research, we hope to continue to provide that response.

FIGURE ONE  
SIMILARITIES AND CONTRASTS IN CASE STUDIES

<u>Cluster</u>	<u>Division of Insurance</u>	<u>Division of Boiler Inspection</u>
Context	Polyarchic, unstable, interstate interdependence, dominant linkage is political (state legislature).	Polyarchic, stable, intrastate interdependence, dominant linkage is technical (National Board and ASME).
Norms	Clear, technically visible, high consensus, pervasive, unstable, moderately consistent in application, evolutionary in emergence.	Clear, technically visible, moderate consensus, pervasive, stable (but easily upset by technological change), very consistent application, emerge in response to technological change.
Performance Curves	A few giants dominate the industry, performance is primarily financial (assets, surplus, premium revenue).	A wide range of participants, performance becomes visible only in cases of vessel failure.
Control Agents	Revenue-producing but low status and low prestige, moderate complementarity with other agents, explicit division of labor, little overlap.	Revenue-producing but low status and low prestige; high complementarity, implicit division of labor, some overlap (particularly with regard to surveillance).
Surveillance Capacity	Technically complex, labor intensive, high cost per unit monitored; strategies of delegation (to the customer) and geographic decentralization (to expand capacity). Potential adaptation of computer technology. Informal outweighs formal.	Manufacture is technically complex, operation only moderately complex; labor intensive, low cost per unit monitored; strategies of delegation (insurance inspectors, facilities inspectors, OSHA) and geographical decentralization. Little need for utilization of computer technology. Little use of informal mechanisms.
Sanctions and Incentives	Reliance on formal vs. informal sanctions (fines and de-licensing), little use of sanctions actually made. Public disclosure is effective threat.	De-certification, refusal to issue an operating license, and fines are the formal sanctions. Fines, when used, are minimized.
Compliance-Readiness	High compliance-readiness. Low ideological or economic cost, few rewards to negative reference groups, regulator perceived as legitimate.	Moderate compliance-readiness, related to one-error character of operations. High economic cost, low organizational capacity, low perceived legitimacy for some segments of user population.

REFERENCES

Anderson, James E.

- 1962 The Emergence of the Modern Regulatory State. Washington, D.C.: Public Affairs Press.

Averch, Harvey, and Leland Johnson

- 1962 "Behavior of the firm under regulatory constraint." American Economic Review, 52: 1053-69.

Bailey, Elizabeth, and Roger Coleman

- 1971 "The effect of lagged regulation in an Averch-Johnson model." Bell Journal of Economics and Management Science, 2: 278-92.

Bailey, E.E., and J.C. Malone

- 1970 "Resource allocation and the regulated firm." Bell Journal of Economics and Management Science, 1: 129-42.

Baldwin, David A.

- 1971 "The power of positive sanctions." World Politics, 24: 19-38.

Baldwin, John Russel

- 1975 The Regulatory Agency and the Public Corporation. Cambridge: Ballinger Publishing Company.

Baumol, W.J., and A.K. Klevorick

- 1970 "Input choices and rate of return regulation." Bell Journal of Economics and Business Management Science, 1: 162-90.

Becker, T.L., and M. Feeley

- 1969 The Impact of Supreme Court Decisions: Empirical Studies. New York: Oxford University Press.

Bell, Daniel

- 1971 "The corporation and society in the 1970's." Public Interest, 24: 5, 29-30.

Bendix, Reinhard

- 1956 Work and Authority in Industry. New York: Wiley.

Benson, Lee

- 1955 Merchants, Farmers, and Railroads: Railroad Regulation and New York Politics, 1850-1887. Cambridge, Massachusetts: Harvard University Press.

Berger, Michael A.

- 1978 The Social Control of Institutions: A Test of the Capture Hypothesis. Unpublished doctoral dissertation, Vanderbilt University, Nashville, Tennessee.

Berle, Adolph, and Gardner Means

- 1932 The Modern Corporation and Private Property. New York: Macmillan Company.

Bernstein, Marver

- 1955 Regulating Business by Independent Commission. Princeton, New Jersey: Princeton University Press.

Bernstein, Marver H.

- 1972 "Independent regulatory agencies: a perspective on their reform." Annals of the American Academy, 400: 14-26.

Blaisdell, Thomas C.

- 1932 The Federal Trade Commission: An Experiment in the Control of Business. New York: McGraw-Hill.

Blalock, Hubert

- 1967 Toward a Theory of Minority Group Relations. New York: John Wiley.

Blau, Peter,

- 1964 Exchange and Power in Social Life. New York: John Wiley.

Blau, Peter, and William Scott

- 1962 Formal Organizations. San Francisco: Chandler.

Caine, Stanley P.

- 1970 The Myth of Progressive Reform. Madison: University of Wisconsin Press.

Caves, Richard E., and Marc J. Roberts

- 1975 Regulating the Product: Quality and Variety. Cambridge: Ballinger Publishing Company.

Chamberlain, Joseph P., et al.

- 1942 The Judicial Function in Federal Administrative Agencies. New York: The Commonwealth Fund.

Clark, Peter, and James Q. Wilson

- 1961 "Incentive systems: a theory of organizations." *Administrative Science Quarterly*, 6: 129-66.

Crozier, Michel

- 1964 *The Bureaucratic Phenomenon*. Chicago: University of Chicago Press.

Cushman, Robert E.

- 1941 *The Independent Regulatory Commissions*. New York: McGraw-Hill.

Cutler, Lloyd N., and David R. Johnson

- 1975 "Regulation and the political process." *Yale Law Journal*, 84: 1395-1419.

Cyert, Richard, and James G. March

- 1963 *A Behavioral Theory of the Firm*. Englewood Cliffs, New Jersey: Prentice-Hall.

Dahl, R.A., and C.E. Lindblom

- 1965 *Politics, Economics and Welfare*. New York: Harper & Row.

Dahrendorf, Ralf

- 1959 *Class and Class Conflict in Industrial Society*. Stanford, California: Stanford University Press.

Davis, G. Cullom

- 1962 "The transformation of the Federal Trade Commission, 1914-1929." *Mississippi Valley Historical Review*, XLIX: 452-72.

Denenberg, Herbert

- 1972 "A new approach to regulation." *The Progressive*, December: 17-19.

Downs, Anthony

- 1966 *Inside Bureaucracy*. Boston: Little, Brown.

Dubin, Robert

- 1975 "Organization effectiveness: some dilemmas of effectiveness." Unpublished paper, School of Business Administration, University of California, Irvine.

Duncan, Otis Dudley, and Leo F. Schnore

- 1959 "Cultural behavior and ecological perspectives for the study of social organization." *American Journal of Sociology*, 65: 132-46.

Dunlop, John T.

- 1976 "The limits of legal compulsion." *Conference Board Record*, 13: 23-27.

Emerson, Richard M.

- 1962 "Power-dependent relations." *American Sociological Review*, 27: 31-41.

Emery, F.E., and Eric Trist

- 1965 "The causal texture of organizational environments." *Human Relations*, 18: 21-31.

Etzioni, Amitai

- 1961 *A Comparative Analysis of Complex Organizations*. Glencoe: The Free Press.

Evan, William

- 1966 "The organization-set: toward a theory of interorganizational relations." In James D. Thompson (ed.), *Approaches to Organization Design*. Pittsburgh: University of Pittsburgh Press.

Fainsod, Merle

- 1940 "Some reflections on the nature of the regulatory process." In C.J. Friedrich and E.S. Mason (eds.), *Public Policy 1940*. Cambridge: Harvard University Press: 297-323.

Firey, Walter

- 1945 "Sentiment and symbolism as ecological variables." *American Sociological Review*, 10: 140-48.

Friendly, Henry J.

- 1962 *The Federal Administrative Agencies: The Need for Better Definitions of Standards*. Cambridge: Harvard University Press.

Gamson, William

- 1968 *Power and Discontent*. Homewood, Illinois: Dorsey Press.

Gaskill, Nelson B.

- 1936 *The Regulation of Competition*. New York: McGraw-Hill.

Gellhorn, J.

- 1973 "Use of adverse publicity." *Harvard Law Review*, 86: 1380-1441.

Gibbs, Jack

- 1965 "Norms: the problem of definition and classification." American Journal of Sociology, 70: 586-94.

Grafton, Carl

- 1975 "The creation of federal agencies." Administration and Society, 7: 328-65.

Graham, Otis L.

- 1971 From Roosevelt to Roosevelt: American Politics and Diplomacy. New York: Ronald Press.

Greene, Arthur M.

- 1955 History of the ASME Boiler Code. New York: American Society of Mechanical Engineers.

Henderson, Gerard C.

- 1924 The Federal Trade Commission: A Study in Administrative Law and Procedure. New Haven: Yale University Press.

Hendricks, W.

- 1975 "The effect of regulation on collective bargaining in electric utilities." Bell Journal of Economics and Business Management, 6: 451-65.

Herring, E. Pendleton

- 1936 Public Administration and the Public Interest. Cambridge: Harvard University Press.

Hilton, George

- 1966 "The consistency of the Interstate Commerce Act." Journal of Law and Economics, IX: 87-110.

Hirschman, Albert O.

- 1970 Exit, Voice and Loyalty: Responses to Declines in Firms, Organizations and States. Cambridge: Harvard University Press.

Homans, George

- 1961 Social Behavior: Its Elementary Forms. New York: Harcourt Brace Jovanovich.

Huntington, Samuel P.

- 1952 "The marasmus of the ICC: the commission, the railroads, and the public interest." Yale Law Journal, LXI: 467-509.

Jaffe, Jeffrey

- 1974 "The effect of regulation changes on insider trading." Bell Journal of Economics and Management Science, V: 93-121.

Jaffe, Louis L.

- 1954 "The effective limits of the administrative process: a re-evaluation." Harvard Law Review, 57: 1105-35.

Janowitz, Morris

- 1975 "Sociological theory and social action." American Journal of Sociology, 81: 82-108.

Johnson, R.L.

- 1969 "Compliance and Supreme Court decision-making." In Theodore Becker and Malcolm Feeley (eds.), The Impact of Supreme Court Decisions. New York: Oxford University Press.

Jordan, William A.

- 1972 "Producer protection, prior market structure and the effects of government regulation." Journal of Law and Economics, 15: 151-76.

Joskow, P.L.

- 1973 "Cartels, competition and regulation in the property-liability insurance business." Bell Journal of Economics and Management Science, 4: 375-427.

Kahn, Alfred

- 1971 The Economics of Regulation: Principles and Institutions, Vol. II. New York: John Wiley.

Kerr, K. Austin

- 1968 American Railroad Politics, 1914-1920. Pittsburgh: University of Pittsburgh Press.

Killian, Lewis

- 1965 "Social movements." In Robert Faris (ed.), Handbook of Modern Sociology. Chicago: Rand McNally: 426-455.

Kimball, Spencer

- 1960 Insurgence and Public Policy. Madison: University of Wisconsin Press.

Klevorick, Alvin

- 1973 "The behavior of a firm subject to stochastic regulatory review." Bell Journal of Economics and Management Science, 4: 57-88.

Koch, James V.

- 1974 Industrial Organization and Prices. Englewood Cliffs, New Jersey: Prentice-Hall.

Kolko, Gabriel

- 1963 The Triumph of Conservatism. New York: McGraw-Hill.  
1965 Railroads and Regulation. Princeton: Princeton University Press.

Kuhn, Thomas

- 1970 The Structure of Scientific Revolutions. Chicago: University of Chicago Press.

Kulp, C.A.

- 1956 Casualty Insurance. New York: Ronald Press Company.

Landis, James M.

- 1938 The Administrative Process. New Haven: Yale Press.

Lenski, Gerhard

- 1966 Power and Privilege. New York: McGraw-Hill.

Levine, Sol, and Paul White

- 1961 "Exchange as a conceptual framework for the study of inter-organizational relationships." Administrative Science Quarterly, 5: 583-601.

Lilly, Claude C.

- 1976 "A history of insurance regulation." CPCU Annals, 29: 99-115.

Lindblom, Charles

- 1968 The Policy Making Process. Englewood Cliffs, New Jersey: Prentice-Hall.

Loomis, Carol

- 1976 "An accident report on GEICO." Fortune: 126-131.

Lowenthal, James B.

- 1978 The Social Control of Institutions: An Exploratory Analysis of Regulatory Effectiveness. Unpublished doctoral dissertation, Nashville, Tennessee.

Lowi, Theodore

- 1969 The End of Liberalism: Ideology, Policy and the Crisis of Public Authority. New York: W.W. Norton.

MacAvoy, Paul

- 1971 "The regulation-induced shortage of natural gas." Journal of Law and Economics, XIV: 167-99.

MacAvoy, Paul W.

- 1970 The Crisis of the Regulatory Commissions. New York: Norton.

Magee, J.H., and D.L. Bickelhaupt

- 1964 General Insurance. Homewood, Illinois: Richard C. Irwin.

March, James, and H. Simon

- 1958 Organizations. New York: Wiley.

Martin, Albro

- 1971 Enterprise Denied: Origins of the Decline of the American Railroads, 1897-1917. New York: McGraw-Hill.

Massel, Mark

- 1961 "The regulatory process." Law and Contemporary Problems, 26: 181-202.

McKie, James

- 1970 "Regulation and the free market: the problem of boundaries." Bell Journal of Economics and Business Management, 1: 6-26.

Merton, Robert

- 1957 Social Theory and Social Structure. Glencoe, Illinois: Free Press.

Milgram, Stanley

- 1974 Obedience to Authority. New York: Harper & Row.

Miller, George H.

- 1971 Railroads and the Granger Laws. Madison: University of Wisconsin Press.

Mills, C. Wright

- 1958 "The structure of power in American society." In C. Wright Mills, Power, Politics and People. New York: Balantine Books; also in British Journal of Sociology, 9: 29-41.

Moore, Thomas G.

- 1972 Freight Transportation Regulation: Surface Freight and the Interstate Commerce Commission. Washington, D.C.: Brookings Institution.

Morris, Richard

- 1956 "A typology of norms." American Sociological Review, 21: 610-13.

Nash, Gerald

- 1957 "Origins of the Interstate Commerce Act of 1887." Pennsylvania History, XXIV: 181-190.

Nelson, Dalmas H.

- 1964 Administrative Agencies of the U.S.A.: Their Decisions and their Authority. Detroit: Wayne State University Press.

Noll, Roger G.

- 1971 Reforming Regulation: An Evaluation of the Ash Council Proposal (Studies in the Regulation of Economic Activity). Washington, D.C.: Brookings Institution.
- 1974 "Government administrative behavior and technological innovation." Social Science Working Paper No. 62. Pasadena, California: California: California Institute of Technology.

Oberschall, Anthony

- 1973 Social Conflict and Social Movements. Englewood Cliffs, New Jersey: Prentice-Hall.

Olson, Mancur, Jr.

- 1965 The Logic of Collective Action: Public Goods and the Theory of Groups. Cambridge: Harvard University Press.

Pareto, Vilfred

- 1935 The Mind and Society (translated by A. Bongiorno and A. Livingston). New York: Harcourt Brace Jovanovich.

Park, Robert E.

- 1936 "Human ecology." American Journal of Sociology, 42: 1-15.

Parrish, Michael A.

- 1970 Securities Regulation and the New Deal. New Haven: Yale Press.

Perrow, Charles

- 1965 "Hospitals: technology, structure, goals." In J. March (ed.), Handbook of Organizations: 910-971. Chicago: Rand McNally.

Pfeffer, Jeffrey

- 1974 "Administrative regulation and licensing: social problems or solution." Social Problems, 21: 468-79.

Plotkin, Irving

- 1969 "Rates of returns in the property and liability insurance industry." Journal of Risk and Insurance, 36: 173-216.

Posner, R.A.

- 1974 "Theories of economic regulation." Bell Journal of Economics and Management Science, 5: 335-358.

Purcell, Edward

- 1967 "Ideas and interests: businessmen and the Interstate Commerce Act." Journal of American History, LIV: 561-78.

Redford, Emmette

- 1969 The Regulatory Process: With Illustrations from Commercial Aviation. Austin: University of Texas Press.

Redford, Emmette S.

- 1962 "Perspectives for the study of government regulation." Midwest Journal of Political Science, 6: 1-18.

Reisman, David, et al.

- 1951 The Lonely Crowd. New Haven: Yale University Press.

Roethlisberger, F., and William Dickson

- 1939 Management and the Worker. Cambridge: Harvard University Press.

Rose, Arnold

- 1967 The Power Structure. New York: Oxford University Press.

Schuck, Peter H.

- 1975 "Why regulation fails." Harper's, 251: 16-29.

Schwartz, Barnard

- 1973 The Economic Regulation of Business and Industry. New York: Chelsea House Publishers.

- Selznick, Philip
- 1949 TVA and the Grass Roots. Berkeley: University of California Press.
- Serber, David
- 1975 "Regulating reform: the social organization of insurance regulations." *The Insurgent Sociologist*, 5: 83-106.
- Sharfman, I. Leo
- 1931 The Interstate Commerce Commission. New York: McGraw-Hill.
- Shepard, William G., and Thomas G. Cies
- 1974 Regulation in Further Perspective. Cambridge: Balinger Publishing Company.
- Sherer, F.M.
- 1970 Industrial Market Structure and Economic Performance. Chicago: Rand-McNally.
- Stigler, G.J.
- 1974 "Free riders and collective action: an appendix to theories of economic regulation." *Bell Journal of Economics and Management Science*, 5: 359-65.
- Stigler, George
- 1971 "The theory of economic regulation." *Bell Journal of Economics and Management Science*, 2: 3-21.
- Stigler, George, and Claire Friedland
- 1962 "What can regulators regulate? The case of electricity." *Journal of Law and Economics*, 5.
- Stone, Christopher
- 1975 Where the Law Ends: The Social Control of Corporate Behavior. New York: Harper & Row.
- Thibaut, John, and Harold Kelley
- 1959 The Social Psychology of Groups. New York: John Wiley.
- Thompson, James D.
- 1967 Organizations in Action. New York: McGraw-Hill.
- Thompson, J.D., and W.J. McEwen
- 1958 "Organization goals and environment." *American Sociological Review*, 23: 23-31.

- Trebing, Harry M.
- 1974 "Critique of regulation's accommodation to change." In W.C. Shepard and T.G. Geis (eds.), *Regulation in Further Perspective*. Cambridge: Balinger Publishing Company.
- Vladeck, Bruce
- 1976 "Why non-profits go broke." *Public Interest*, 42: 86-101.
- Weaver, Paul H.
- 1977 "Regulation, social policy, and class conflict." *Public Interest*, 50: 45-63.
- Weber, Max
- 1947 The Theory of Social and Economic Organization. New York: Free Press of Glencoe.
- Weidenbaum, Murray L.
- 1975 Government-Mandated Price Increases: A Neglected Aspect of Inflation. Washington, D.C.: American Enterprise Institute for Public Policy Studies.
- Wiley, Mary G., and Mayer N. Zald
- 1968 "The growth and transformation of educational accrediting agencies: an exploratory study in the social control of institutions." *Sociology of Education*, 41: 36-56.
- Wilson, James Q.
- 1971 "The dead hand of regulation." *Public Interest*, 25: 39-58.
- 1974 "The politics of regulation." In James McKie, *Social Responsibility and the Business Predicament*, 135-169. Washington, D.C.: Brookings Institution.
- Zald, Mayer N.
- 1969 "The power and functions of boards of directors: a theoretical synthesis." *American Journal of Sociology*, 75: 97-111.
- 1970 "Political economy: a framework for comparative analysis." In M.N. Zald (ed.), *Power in Organizations*, 221-262. Nashville: Vanderbilt University Press.
- 1971 "The visible hand." Unpublished manuscript, Department of Sociology, Vanderbilt University.
- 1978 "On the social control of industries." *Social Forces*, 57: 79-102.

Zald, Mayer N., and F.D. Hair

- 1972 "The social control of hospitals." In Basil Georgopoulos (ed.), *Organization Research on Health Institutions*, 51-82. Ann Arbor, Michigan: Institute for Social Research.

Zald, Mayer N., and David Jacobs

- 1978 "Compliance incentive classifications of organizations: underlying dimensions." *Administration and Society*.

Zeitlin, M.

- 1974 "Corporate ownership and control." *American Journal of Sociology*, 79: 1073-1119.



## WORKING PAPERS OF THE CENTER FOR RESEARCH ON SOCIAL ORGANIZATION

The Center for Research on Social Organization is a facility of the Department of Sociology, University of Michigan. Its primary mission is to support the research of faculty and students in the department's Social Organization graduate program. CRSO Working Papers report current research and reflection by affiliates of the Center; many of them are published later elsewhere after revision. Working papers which are still in print are available from the Center for a fee of 50 cents plus the number of pages in the paper (83 cents for a 33-pages, etc.). The Center will photocopy other papers at cost (approximately five cents per page). Recent Working Papers include:

- 184 "The Marburg Studentenkorps: An Alternative View of the 'Prehistory' of Nazism," Rudy Koshar, November 1978, 29 pages.
- 185 "Social Control and Public Policy: Understanding Dilemmas of Regulation and Implementation," Erwin Hargrove and Mayer N. Zald, November 1978, 35 pages.
- 186 "Source Reading for Contentious Gatherings in Nineteenth-Century British Newspapers," R.A. Schweitzer, December 1978, 53 pages.
- 187 "Was Holding Out the Key to Success in Strikes?: Massachusetts, 1881-1894," Carol Conell, December 1978, 32 pages.
- 188 "Resource-Mobilization, Repression, and Working-Class Protest: Lyon, France Under the Second Republic," Robert Liebman, forthcoming.
- 189 "Did the Cake of Custom Break?" Charles Tilly, December 1978, 47 pages.
- 190 "Women and Collective Action in Industrializing France, 1870-1914," Louise A. Tilly, January 1979, 32 pages.
- 191 "The Rise and Fall of the Bourgeois Family, as Told by Lawrence Stone and Christopher Lasch," Charles Tilly and Louise A. Tilly, January 1979, 11 pages.
- 192 "The Family Wage Economy of a French Textile City, Roubaix, 1872-1906," Louise A. Tilly, January 1979, 23 pages.
- 193 "Sociology, Meet History," Charles Tilly, February 1979, 97 pages.

Request copies of these papers, the list of available Working Papers and other reprints, or further information about Center activities from: Center for Research on Social Organization, University of Michigan, 330 Packard Street, Ann Arbor, Michigan 48109.