INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or “target” for pages apparently lacking from the document photographed is “Missing Page(s)”. If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.

2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.

3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in “sectioning” the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.

4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from “photographs” if essential to the understanding of the dissertation. Silver prints of “photographs” may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.

5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

University Microfilms International
300 North Zeib Road
Ann Arbor, Michigan 48106 USA
St. John's Road, Tyler's Green
High Wycombe, Bucks, England HP10 8HR
PLUMLEE, John Patrick, 1945-
REGULATORY ADMINISTRATION AND ORGANIZATIONAL RIGIDITY: AN EMPIRICAL ANALYSIS.

Rice University, Ph.D., 1977
Political Science, general

Xerox University Microfilms, Ann Arbor, Michigan 48106
PLEASE NOTE:

Pages 113 and 134 are lacking in number only. No text is missing. Filmed as received.

UNIVERSITY MICROFILMS.
RICE UNIVERSITY

REGULATORY ADMINISTRATION AND ORGANIZATIONAL RIGIDITY: AN EMPIRICAL ANALYSIS

by

John P. Plumlee

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

Thesis Director's Signature

Houston, Texas

May 1977
ACKNOWLEDGEMENTS

Although I originally had not intention of making written acknowledgements for the assistance I have received in the writing of this paper, it now seems to me a violation of courtesy and fairness not to do so.

I am pleased first of all to acknowledge the breadth and depth of the support I received from my advisor, Dr. Kenneth J. Meier. I can say without exaggeration that lacking his ideas, energy, and good will this project could scarcely have begun, much less have been successfully completed. My debt to Dr. Meier is profound, and is profoundly acknowledged.

I would also like to express my appreciation to Dr. Joe Cooper, who served on my dissertation committee. In addition to his contributions to this paper, Dr. Cooper has provided insight and guidance over the last four years. The learning process under Dr. Cooper has sometimes been painful, but it has always been fruitful.

Dr. Stanley Besen of the Department of Economics must also be mentioned. I am especially grateful to him for taking on the advisory assignment at the eleventh hour, and providing some useful guidance.

If there is ever a time when one needs a friend, it must be through the particular rigors of graduate school. Therefore, I cannot overlook Patricia Hurley, my close friend and confident throughout the trials and joys of the last four years. My appreciation of and for her is unbounded.
I cannot leave unremarked the support, encouragement, and intellectual stimulation provided by the other members, both faculty and graduate students, of the Department of Political Science. This includes the departmental secretary, Ms. Jaquie Ehlers, who has often performed above and beyond the call of duty to shepherd me and various other befuddled graduate students through the toils of departmental and university administration.

Finally, I cannot forgo a word of appreciation to all my friends at St. Stephen's Church. Without their support and unwavering faith and confidence in me, completing this program would have been far more difficult. In a very real sense each of them should be listed as contributors to this paper. Two, however—Laura D'Alisera and John Fleming—stand out for the special quality of friendship and encouragement they have so freely given.

There now. These acknowledgements, like my graduate years, must now end so that there will be a time and a place for yet another beginning, for doing some thing yet undone. My ultimate appreciation must flow from the actions of my life, from being the person that all of these special people had the confidence that I would be. That, to paraphrase Chaucer, is my task and my devotion, which is not now to be closed, but rather to be opened.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>i</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF ILLUSTRATIONS</td>
<td>viii</td>
</tr>
<tr>
<td>CHAPTER I. REGULATION AND REGULATORY REFORM IN THE UNITED STATES</td>
<td>1</td>
</tr>
<tr>
<td>The Regulatory Dilemma</td>
<td>1</td>
</tr>
<tr>
<td>A Primer on Regulation</td>
<td>3</td>
</tr>
<tr>
<td>The Social Control of Business</td>
<td>7</td>
</tr>
<tr>
<td>Economic Distortions</td>
<td>12</td>
</tr>
<tr>
<td>Price Regulation</td>
<td>13</td>
</tr>
<tr>
<td>Franchise Awards</td>
<td>14</td>
</tr>
<tr>
<td>Influencing Technological Change</td>
<td>15</td>
</tr>
<tr>
<td>Product and Process Quality Controls</td>
<td>15</td>
</tr>
<tr>
<td>Institutional Responsiveness</td>
<td>16</td>
</tr>
<tr>
<td>Reforming Regulation</td>
<td>21</td>
</tr>
<tr>
<td>Regulation is Here to Stay</td>
<td>25</td>
</tr>
<tr>
<td>Regulation, Public Power, and the Rigidity Cycle</td>
<td>26</td>
</tr>
<tr>
<td>Notes</td>
<td>30</td>
</tr>
<tr>
<td>CHAPTER II. THE LIFE CYCLE OF REGULATORY AGENCIES</td>
<td>38</td>
</tr>
<tr>
<td>A Theory with Broad Appeal</td>
<td>38</td>
</tr>
<tr>
<td>Bernstein: The Life Cycle of the Regulatory Commissions</td>
<td>39</td>
</tr>
<tr>
<td>Gestation</td>
<td>40</td>
</tr>
<tr>
<td>Youth</td>
<td>40</td>
</tr>
<tr>
<td>Maturity: The Process of Devitalization</td>
<td>42</td>
</tr>
<tr>
<td>Old Age: Debility and Decline</td>
<td>43</td>
</tr>
<tr>
<td>Comments</td>
<td>45</td>
</tr>
<tr>
<td>Downs: The Life Cycle of Bureaucratic Organizations</td>
<td>46</td>
</tr>
<tr>
<td>Comments</td>
<td>50</td>
</tr>
<tr>
<td>A Synthetic View</td>
<td>52</td>
</tr>
<tr>
<td>Notes</td>
<td>59</td>
</tr>
<tr>
<td>CHAPTER III. THE RESEARCH MODEL AND SOME HYPOTHESES</td>
<td>64</td>
</tr>
<tr>
<td>The Research Model</td>
<td>64</td>
</tr>
<tr>
<td>Main Hypotheses</td>
<td>68</td>
</tr>
<tr>
<td>Ancillary Hypotheses</td>
<td>70</td>
</tr>
<tr>
<td>The Variables</td>
<td>75</td>
</tr>
</tbody>
</table>
Rigidity ........................................ 76
Capture ........................................ 76
Political Support ............................... 77
Age ............................................. 73
The Nature of the Data ........................ 73
The Agencies .................................... 80
  The Civil Aeronautics Board ............... 82
  The Federal Communications Commission .. 82
  The Federal Trade Commission .............. 83
  The National Labor Relations Board ....... 83
  The Federal Aviation Administration ...... 84
  The Occupational Safety and Health
  Administration ................................ 84
  The Packers and Stockyards Administration. 85
Notes ........................................... 87

CHAPTER IV. AGENCY ELITES AND THE AGENCY LIFE CYCLE: SOME
TRENDS OVER TIME .............................. 89

The Study of Agency Elites ..................... 89
Agency Elites in the Present Context ........ 94
Agency Elites and Agency Rigidity .......... 96
Professionalization and Rigidity ........... 106
Support and Rigidity .......................... 110
Agency Performance ........................... 118
Agency Elites and the Life Cycle .......... 122
Notes ........................................... 126

CHAPTER V. MODELS OF THE LIFE CYCLE ...................... 130

The Analytic Approach ......................... 130
Construction of the Variables ................ 131
Derivation of the Preliminary Path
  Coefficients .................................. 139
Derivation of the Final Path Coefficients .. 142
A Model Representing All Agencies ........ 143
Age and Support ................................ 144
Support and Capture ........................... 145
Capture and Rigidity ........................... 148
Other Relationships ............................ 149
Analysis of Individual Agency Models ...... 151
Conclusions Derived from All of the Models . 154
Notes ........................................... 157

CHAPTER VI. THE LIFE CYCLE AND REGULATORY POLICY ......... 159

A Summary and a Re-examination of the
  Hypotheses ................................... 159
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Age and Environment</td>
<td>170</td>
</tr>
<tr>
<td>Agency Capture and Public Power</td>
<td>175</td>
</tr>
<tr>
<td>Some Policy Recommendations</td>
<td>177</td>
</tr>
<tr>
<td>A Final Assessment</td>
<td>181</td>
</tr>
<tr>
<td>Notes</td>
<td>183</td>
</tr>
</tbody>
</table>

**SELECTED BIBLIOGRAPHY** 184
LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1. Summary Statistics Describing Relationship Between Rate Regulated Industries and GNP</td>
<td>4</td>
</tr>
<tr>
<td>1-2. Transportation Sector Revenues</td>
<td>4</td>
</tr>
<tr>
<td>1-3. Estimate of the Economic Loss from ICC Regulation in 1968</td>
<td>34</td>
</tr>
<tr>
<td>2-1. Summary of Life Cycle Models</td>
<td>53</td>
</tr>
<tr>
<td>4-1. Distribution of Years from Leaving Regulatory Agency to Retirement or Death</td>
<td>93</td>
</tr>
<tr>
<td>4-2. Profile of Regulatory Elites in Eight Agencies Through 1974</td>
<td>97</td>
</tr>
<tr>
<td>4-3. Pearson Correlation Coefficients (r) Indicating Relationship of Agency Age to Elite Recruitment from and Retirement to the Regulated Interests</td>
<td>100</td>
</tr>
<tr>
<td>4-4. Distribution of Agency &quot;Insiders&quot; and &quot;Experts&quot;</td>
<td>102</td>
</tr>
<tr>
<td>4-5. Pearson Correlation Coefficients (r) Indicating Relationship of Agency Age to the Recruitment of &quot;Insiders&quot; and &quot;Experts&quot;</td>
<td>103</td>
</tr>
<tr>
<td>4-6. Longevity of Regulatory Agency Elites in Years</td>
<td>104</td>
</tr>
<tr>
<td>4-7. Pearson Correlation Coefficients (r) Indicating Relationship of Agency Age to Elite Age and Elite Turnover</td>
<td>105</td>
</tr>
<tr>
<td>4-8. Occupational Status and Educational Attainment of Agency Elites</td>
<td>107</td>
</tr>
<tr>
<td>4-9. Pearson Correlation Coefficients (r) Indicating Relationship Between Agency Age and the Percentage of Lawyers Recruited by the Regulatory Agencies</td>
<td>109</td>
</tr>
<tr>
<td>4-10. Pearson Correlation Coefficients (r) Indicating Relationship of Agency Age to the Behavior of Agency Appropriations</td>
<td>112</td>
</tr>
<tr>
<td>4-11. Pearson Correlation Coefficients (r) Indicating Relationship of Agency Age to Political Support</td>
<td>117</td>
</tr>
<tr>
<td>TABLE</td>
<td>PAGE</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>4-12. Pearson Correlation Coefficients (r) Indicating Relationship of Agency Age to Two Performance Indicators</td>
<td>120</td>
</tr>
<tr>
<td>4-13. Pearson Correlation Coefficients (r) Indicating Relationship of Agency Age to Personnel Growth</td>
<td>123</td>
</tr>
<tr>
<td>5-1. Factor Loadings for Political Support</td>
<td>135</td>
</tr>
<tr>
<td>5-2. Factor Loadings for Agency Rigidity</td>
<td>137</td>
</tr>
<tr>
<td>5-3. Path Coefficients of Individual Agency Models</td>
<td>151</td>
</tr>
</tbody>
</table>
LIST OF ILLUSTRATIONS

PAGE

2-1. Hypothesized Relationship Between Diffuse Support and Regulatory Agency Life Phase ............ 58
2-2. Hypothesized Relationship Between Specific Support and Regulatory Agency Life Phase ............ 58
3-1. The Agency "Rigidity Cycle" Model .................. 65
5-1. The Agency Life Cycle Model ....................... 140
5-2. Combined Agencies Model ............................ 144
CHAPTER I

REGULATION AND REGULATORY REFORM IN THE UNITED STATES

The Regulatory Dilemma

In November of 1975, President Gerald Ford restated in a message to Congress what has become one of the dominant themes of his administration. President Ford said,

[O]ver the years... [w]e have built a patchwork of economic regulation which shapes and controls competition in industries which are naturally competitive. As a consequence, those industries have come to rely on regulation to protect them from meaningful competition. It is now clear that this patchwork regulatory structure has not kept pace with changes in... industry and the economy. We have permitted regulation designed in theory to protect the public to become in practice the protector of special industry interests.1

The President's remarks echo the replaying of a familiar theme in American national politics—the costs and benefits of the governmental regulation of industry. The concerns of the President with respect to the adverse effects of regulation are widely shared at a time when the national economy is sagging, and when there has been a new concern for the rights of the consumer to be heard in decisions which affect the lives and fortunes of millions. As The National Journal reported early in 1975, there is a "growing distaste" for active government regulation throughout parts of the federal establishment.2 The recent legislative struggle in Congress over the deregulation of natural gas has emphasized the impact that regulatory policy has on daily life.3 Congress has taken a new interest in the problems of regulation and, as evidenced by their remarks in recent Senate hearings, even many high officials of
the regulatory agencies themselves have admitted the critical need for regulatory reform.⁴ The humorous remark of the Director of the Federal Trade Commission's Bureau of Economics that: "The Supreme Power who conceived gravity, supply and demand, and the double helix must have been absorbed elsewhere when public utility regulation was invented," only slightly exaggerates the nearly cosmic complexities and entanglements of the regulatory process as it is practiced in the United States.⁵ These complexities confront any serious attempt to achieve a thorough overhaul of regulatory policy.

President Ford has already encountered the inevitable roadblocks to reform which mark the high road to deregulation. The Wall Street Journal has described some of the President's frustrations:

Mr. Ford's drive to shrink the federal regulatory mountain is lagging behind his antiregulation rhetoric. . . . The President is finding the task far from easy, largely because businessmen themselves have been telling the White House and Congress that they need federal regulation and that "reform" should come slowly, if at all.

"Somebody should have explained to the President that regulatory reform to too many people means, 'Get rid of the regulations I don't like, but keep the regulations I do like,'" says one administration economist who has worked on Ford deregulation proposals.⁶

In another address, President Ford himself admitted the difficulties inherent in eliminating what he calls "outmoded, outdated requirements."⁷ The President remarked: "I must admit it is harder to achieve than what it appears to be."⁸

The inability of President Ford to effectively confront and surmount the regulatory dilemma comes as no surprise in view of the many past failures in this area. A large number of forces and factors impinge on regulatory policies insuring that a single President in a single
administration will be unable to affect them all. The same can be said of many Presidents and many administrations. The complexities of regulatory policy which baffle Presidents insure that no single paper can hope to examine all the issues raised by regulation. This paper is no exception. What this paper will do is discuss some of the major issues and contexts of the regulatory process, and then seek to examine empirically what has been considered by some scholars to be a crucial aspect of that process. This paper tests the theory of the regulatory agency "life cycle," and the concomitant phenomenon of "capture" of the regulatory agencies by the regulated industries. The "capture" thesis has been an aspect of regulation from its inception, and is one of the dominant "images" of the regulatory process in the minds of both scholars and laymen.\textsuperscript{9} Since 1955, the idea of agency "capture" has been most often thought of in connection with the agency life cycle, as these two were explicitly linked in Bernstein's important book of that year.\textsuperscript{10} This paper will test the validity of that connection, and offer comments on the results of such testing for regulatory politics and the analysis of regulatory politics.

To bring the objectives of this paper into focus, there must be some discussion of the history and context of regulation, and of the major policy issues associated with regulation. Emerging from this discussion will be a sense of the principle obstacles to regulatory reform. The need for empirical research in this vital area will also be highlighted. The present chapter proceeds with these tasks.

\textbf{A Primer on Regulation}

The most outstanding characteristic of the history of regulation in the United States has been its episodic and rather haphazard develop-
ment. Explicit regulation of business began, as MacAvoy notes, with consumer reaction when faced with a single source of supply of some public need. This reaction was to go to the nearest legislature for protection against arbitrary price behavior. The Granger's and shop-keepers' appeals to State legislatures for the regulation of intrastate railroad rates in the 1870's was such a response. This response culminated in a general movement by farmers and merchants to pressure for the formation of the Interstate Commerce Commission, which in 1887 began to control railroad rate discrimination.\textsuperscript{11} But the movement to control "malefactors of great wealth" did not stop with the formation of the ICC. Between 1887 and the present, three major political struggles, led by the Populists between 1890 and 1900, the Progressives between 1900 and 1920, and the New Deal between 1933 and 1940, were fought to achieve a general reorientation of the scope and direction of the national government from that of a limited role, primarily promotional in nature, to that of a major source of economic control. During this period significant developments included the establishment of a modern national banking system, the enactment of substantial railroad legislation, pure food and drug legislation, antitrust laws, and labor laws, and the acceptance and use of independent regulatory commissions.\textsuperscript{12} In all of this however, there was no desire to do away either with capitalism or the then existing economic system, rather the primary purpose behind economic regulation was to correct or prevent abuses and evils in the capitalist system, especially those caused by the rise of industrialism; to lay down socially acceptable rules to govern its operation; to make it operate more satisfactorily in the interest of the masses of people; and to prevent the destruction of individual freedom and democracy through the abuse of economic power. Viewed another way, the regulatory movement represented an effort to extend democratic control over the economic
system and to infuse it with a social conscience.\textsuperscript{13}

Laid out in this linear fashion, the history of regulation seems a march from one triumph to another. Of course, such was not the case. Often reformers did not have completely clear ideas about what they wanted to accomplish, nor the precise means with which to go about imposing control over a diffuse and fragmented economy. The institutional and political arrangements which emerged varied from time to time and from policy area to policy area. Even the bedrock of the regulatory faith—the independent commission—was a product of chance development rather than explicit design.\textsuperscript{14}

Modern regulatory policy can be said, in effect, to have begun, not with turn-of-the-century reformers, but with the New Deal. President Roosevelt's administration brought a concentrated attempt to bring new segments of the nation's economy under the federal regulatory umbrella. This pursuit was supported, by and large, by the public administration theorists of the time. As Louis Jaffe has described, scholars in the 1930's saw the administrative process evolving through two stages, one merging into the other:

[F]irst the identification of the administrative process with the protection of the economically weak and unorganized against the oppression of the economically powerful; and then, because private industry had appeared to fail in its organizing function, the assertion of government responsibility to plan for the well-being of industry.\textsuperscript{15}

Such a policy was an anathema to the conventional business thought of the time, and in some quarters, remains so today. The resistance of business to governmental control has remained a key issue in regulation, and will be discussed in somewhat more detail presently.
Since the 1930's, the trend in the national government, despite sporadic attempts to reverse directions, has been toward increasing federal regulation, not only through independent commissions but through cabinet departments and executive agencies as well. The impact on the economy has been significant, both in absolute and relative terms. Table 1-1 suggests the importance of federal regulation.

<table>
<thead>
<tr>
<th>Regulated Section (1972)</th>
<th>Revenue (billions)</th>
<th>Percent GNP</th>
<th>Percent Under Federal Rate Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>$27.9</td>
<td>2.4</td>
<td>7.0</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>12.5</td>
<td>1.1</td>
<td>58.4</td>
</tr>
<tr>
<td>Telephone/Telegraph</td>
<td>23.7</td>
<td>2.1</td>
<td>28.7</td>
</tr>
<tr>
<td>Transportation</td>
<td>38.5</td>
<td>3.3</td>
<td>(a)</td>
</tr>
</tbody>
</table>

*Unknown

In 1972, motor carriers, airlines, and railroads derived the following gross operating revenues under rates set by various regulatory bodies at the state and national level is shown in Table 1-2.

<table>
<thead>
<tr>
<th>TRANSPORTATION SECTOR REVENUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>(In Billions)</td>
</tr>
<tr>
<td>Air Carrier, Domestic</td>
</tr>
<tr>
<td>International</td>
</tr>
<tr>
<td>Motor Carriers</td>
</tr>
<tr>
<td>Class I Railroads</td>
</tr>
<tr>
<td>Total Transportation Sector</td>
</tr>
</tbody>
</table>
The figures above do not include the impact of regulatory activities carried out by departments and executive agencies. When these are considered, along with the indirect benefits and costs that regulation incurs, regulation can be seen as having a significant impact.

With such high stakes, the distribution of the burdens and benefits of regulation has been a source of continuing conflict in the American political system. The tangle of issues is so great that many discussions of regulations have become quite confusing, and have rarely been comprehensive. Partially this is due to the multi-faceted nature of regulation, but confusion is also due to the conflicting views and perspectives brought to the study of regulation by the many disciplines involved in studying some aspect or another of regulatory policy. While there is probably no completely satisfactory way to bring clarity to this welter of views and problems, the discussion below attempts to sort the major policy questions raised by regulation into three broad issue categories: the problem of the social control of business, the problem of economic distortions, and the problem of institutional responsiveness. While these problem areas are highly interrelated, they will be kept separate here to insure clarity and an understanding of each of the issues in its own right.

**The Social Control of Business**

Recounting the shifting and ambiguous relationships which have characterized government and business in the United States over the past two centuries would require several volumes. Therefore, only the points most salient to regulatory policy will be considered here. As Holton has noted, one of the major categories of government policy regarding business has been a concern for the performance of markets for goods and
services, for capital, and for labor. This concern has been the source of antitrust measures, and of regulatory measures. Antitrust and regulation have been viewed as necessary to maintain competition (or to supply a substitute for it) and efficient resource allocation in these markets. This necessity has led to a schism between symbol and reality. The symbol is that of competition and the self-regulating market. "In the United States competition is a 'good' word. It is almost beyond question or reproach."

The reality, however, has been various industries seeking the protection of government from the vicissitudes of the free market on the grounds that it yields bad results or cannot be made to work in certain circumstances. The result of these contradictory positions has been a fence-straddling position by government, wherein regulation is undertaken with the intention of preserving as much of the free market as possible while trying to "correct" its particular faults in a given area. Certain characteristics of the market prevent the complete success of this approach and government regulation is, as a result, "always uncertain, frequently sloppy and irrational from a 'pure economics' point of view, and always in incipient collision" with the symbolic "free market."

The continuous tension between market and administrative solutions to the demand for some form of guidance to correct the distortions, e.g., the formation of monopolies, has not led to the discovery of an ambiguous "best way" which can place total reliance on either of these approaches. The uncertainty concerning optimal means of meeting demands for market regulation continues to generate heated controversy. This has been especially apparent among economists, although by no means confined to them. For the purposes of this paper, the controversy among
the economists merits some further attention.

At the present time three contending schools of thought have appeared among economists with regard to the social control of business. Allen Gruchy distinguishes these as the decentralists, the institutionalists, and the neoinstitutionalists, and in a lengthy, perceptive analysis he examines each of these in turn. His discussion is followed here, although shortened considerably.

The decentralists hold the position that the most important source of monopoly and oligopoly in the United States has been the direct and indirect assistance of the government. Hence, they advocate the reduction of the role of government in the economy to an absolute minimum. Competition, rather than intervention, will, in the decentralist view, provide adequate control of business power. Arguing that the position of the decentralists is unrealistic in a complex industrial society, the institutionalists assert that the social control of business is largely a matter of ensuring efficient allocation of economic resources. The institutionalists argue that the imperfections of monopoly and oligopoly will be removed if governmental enforcement ensures that price equals marginal cost. They stress "workable competition" as a means of reducing or eliminating the power of big business to impose its values on society. A major problem resides, however, in the inability of the institutionalists to agree on what is meant by "workable competition" or on when or how this condition is achieved.

The neoinstitutionalists criticize the institutionalists on two grounds. They object, first, that the problem of the social control of business is more than simply the efficient allocation of resources. Controlling big business is really the problem of controlling its
economic and political power. This economic and political power allows large enterprises to "influence or shape in major ways the behavior of other firms, trade unions, consumers, and governments at various levels of operation." The advocacy of workable competition does not deal with the problem of explaining how a government that is highly responsive to the aims of large business is going to curb the power of such businesses.

The second critique of the orthodox position involves national priorities. The nation's 2,000 largest corporations play a large role in determining the nation's priorities and the direction in which the economy is to move. The neoinstitutionalists argue that these enterprises must have much of their power to control determination of the national value pattern removed. The institutionalists do not consider this as a major problem.

The neoinstitutionalists further hold that the social control of business cannot be undertaken in isolation. This problem, in their opinion, is only one aspect of the larger problem of the control of the nation's domestic and external economies:

Neoinstitutionalists believe that there can be no satisfactory control of business until the government is freed from the powerful influences of those who manage the large financial and industrial enterprises. . . . This control cannot be effective in an unplanned capitalist system dominated by private business interests with the power to undermine regulatory agencies and to substitute private business welfare for the national interest.

The position of the neoinstitutionalists, as described by Gruchy, shades into a problem which has been a concern of many political scientists and which has a direct bearing on regulatory policy. This is the
relationship of private and public power. There is a growing recognition that "private" governments, particularly giant corporations, are significant public policymakers by virtue of their ability to make authoritative decisions which have the effect of public policy. Where public power is unable or unwilling to control such private power, the private sector will allocate values on the basis of its needs, rather than on the basis of public needs. Thus, the solution of society to the problem of public vs. private power is reflected in the distribution of benefits in the society at any given time.

The functions of government include providing a structure for allocating societal benefits. To the extent that the government, by acquiescence, provides opportunities for the advancement of one societal sector at the expense of others, then questions concerning government intervention involve not only whether there should be or not be regulation, but also who benefits from regulation, and/or to whom does the government listen when formulating regulatory policy. The fragmented, incremental nature of much national policy-making encourages the responsiveness of government primarily to those who have the desire and the adequate resource to penetrate the political process at the administrative stage. This phenomenon seems particularly prevalent in the regulatory agencies, especially the independent commissions. In fact, the most frequent comment made concerning regulatory policy in the United States is that regulatory agencies are more responsive to the interests which they regulate than to the larger "public interest." This responsiveness has often seemed so one-sided that regulatory agencies have been described as "captive" of the regulated interests. The problem of "capture" thus
can be seen as a clear example of the interpenetration of public power by private power.

The dilemma of public and private power is a complex one and, unfortunately, merely asserting the primacy of public values over private values is no solution to the problem. It is easy to say that in principle public values must predominate private values, but to actualize this principle in the day to day workings of a complex economy is another task altogether. In the United States the regulatory agencies have been caught uncomfortably between the idea and the reality. Such a position is inherently untenable, therefore compromises must be made. These compromises tend to push the regulatory agencies toward private sector views and an identification of private values as public values. This phenomenon is an important part of what the neoinstitutionalists describe as the domination of the government by private business interests. Regulation, then, as part of the pattern of the social control of business, public vs. private power, is very much a political as well as an economic problem.

Economic Distortions

Whether or not there is much agreement concerning the role of regulation in the social control of business, one concern which unites both the supporters and detractors of regulation is an active sense of the weaknesses of current regulatory policy as an effective remedy for the ills of the market. Roger Noll, in his study of the Ash Council proposals, has synthesized much of the literature criticizing regulation from the standpoint of economics.\(^{31}\)

Noll states that "the performance of regulatory agencies is unsatisfactory because regulators have chosen to pursue objectives that
are contrary to the public interest. . . ." 32 Since the term "public interest" is vague, Noll specifies in his usage that the term will be applicable to the regulatory agencies "to the extent to which their actions correct for the market failures that were the motivation for establishing regulation." 33 Employing this criterion, Noll discusses four general areas of regulatory policies and practices: price regulation, franchise awards, influencing technological change, and product the process quality controls. Each of these are described and commented upon in turn.

Price Regulation

Economists have criticized the methods and objectives of regulatory commissions in regulating prices. To the economist, prices are guides to efficient resource allocation. The price system can serve this function if each price is a measure of all of the private and social costs of producing one additional unit of output—the marginal cost. Regulatory agencies, however, have not viewed individual price as closely related to either the cost or the social value of the service it covers. "Regulatory policy might be accurately characterized as maximizing the size of the regulated industry, subject to the requirement that a firm's total revenues cover total costs and provide a return on investments that the agencies regard as reasonable." 34 Additionally, the price structure is used to guarantee the provisions of a specific service to a specific locality and/or assure the continuance of the stability of an existing industry. Some specific ways the price structure is used to achieve these ends are as follows.

1. Cross-subsidization is the practice of charging prices above marginal cost for some services to offset losses of other services
due to prices set below marginal cost. The most common use of this strategy is in public utility regulation, telephone service, electric power, and transportation. In the case of airline fares, for example, the Civil Aeronautics Board has attempted to set fares on high-density and long-distance routes above marginal costs. The excess profits earned on these routes are then used to offset losses on the provision of service to cities with little traffic.

2. Protection of a particular industry or firm is carried out by the use of minimum price regulation to prevent low-cost industries from capturing business from high-cost competitors. This is widely used in the transportation sector. The Interstate Commerce Commission has used this policy to prevent railroads from lowering prices to marginal costs and thereby capturing long-distance shipping business from trucking firms. 35

These consequences of price regulation are not necessarily wrong, according to Noll, they are simply the result of selecting some goals over others.

If an important purpose of regulation is to guarantee that certain firms... continue to be economically viable through protection against lower cost competition, then price regulation is not a failure... If, on the other hand, the main purpose of regulation is to protect the consumer against the abuses of monopoly, by fostering competition where possible and by simulating it through price regulation elsewhere, then regulation has failed—not because of ineffectiveness, but because of mis-direction. 36

Franchise Awards

Regulatory agencies control market entry and exit in many cases. The principal criticism of the regulatory agencies here is that they
give undue consideration to the interests of the license applicant or the incumbents and not enough to society in general. For example, the Federal Communications Commission's "conception of satisfactory public interest goals seems remarkable consistent with the profitability goals of the broadcaster." 37

Influencing Technological Change

Critics have argued that regulatory agencies have delayed or prevented a number of technological changes that threatened either to shift a substantial amount of business from one regulated firm or industry to another or to result in decreasing profit for regulated firms. "The agencies most often guilty of such choices are the ICC and the FCC—for example, in impeding used of the Big John hopper railroad car, prohibiting foreign attachments on the switched communications network, the restricting the development of pay TV." 38 Regulatory agencies are quite concerned with the effect of a potential innovation on the distribution of wealth within an industry. "No matter how beneficial an innovation, it has little chance of timely adoption if it will lead to a substantial redistribution of wealth among the regulated that cannot be compensated through some clever regulatory device." 39 Innovation, in short, is not rewarded in regulated industries.

Product and Process Quality Controls

Regulatory agencies are responsible for approving certain products or services,"providing either a guarantee of minimum quality or an assurance that a product or process will have an effect that is tolerable to members of society other than the consumers of the good
Critics feel that most such regulation either makes compliance overly expensive, or creates opposition by the affected industry. The major problem, however, is probably the omission of such controls. One example is the response of the Federal Power Commission to environmental questions in its decisions. In spite of laws, executive orders, and court decisions emphasizing environmental issues, the Commission has persisted in taking a position favorable to industry with respect to prospective hydroelectric installations, while giving inadequate consideration to the general public problem of environmental pollution.

Noll, although critical of the distortions of the current regulatory situation, is milder in tone than many critics. Murray Weidenbaum, for example, in a scathing, but anecdotal, review of waste and inefficiency in regulation states that the major features of the regulatory process are "waste, bias, stupidity, arrogance, concentration on trivia, and, worst of all, arbitrary and often uncontrolled power." Weidenbaum's main concern lies with the hidden and indirect costs of regulation. He notes that the administrative costs of regulation (approximately $2 billion a year to support a regulatory workforce of some 63,000 persons) do not fully represent the social costs of regulation. These show up as costs imposed on the private sector in the form of added expenses of doing business due to the necessity of complying with harsh, vague, or often contradictory regulatory directives.

Institutional Responsiveness

The close relationship between the regulators and the regulated
has been attributed to several causal factors. One of these, already noted, is the existence of a built-in regulatory agency "life cycle" which predisposes regulatory bodies to being captives of the regulated interests. Since an analysis of this "life cycle" theory will occupy the bulk of this paper, it will not be discussed here. Two other broad factors merit some attention, however, as pertinent to the problem of differential responsiveness by regulatory agencies. These factors are related to the institutional context in which the agencies operate, that is, their relationships with other governmental actors. These two factors are agency independence and agency discretion. 45

While the term "independence" has confusing and overlapping meanings in the regulatory setting, 46 one meaning is especially important—the position of the regulatory agency with regard to accountability and responsibility. For many regulatory agencies, but especially for the independent commissions, the lines of responsibility and accountability are vague. The commissions operate in a sort of ambiguous pluralism."They are neither wholly independent nor wholly accountable, and their accountability. . . is neither simple nor clear." 47 One of the results of this vagueness has been that regulatory agencies are only selectively affected by many of the pressures brought on other components of the political system. The independence of the commissions was based on the belief that a quasi-judicial system would insulate decisions from partisan conflict. 48 This intentional partial immunity has been reinforced by some unforeseen factors. Other public institutions, Congress, the Presidency, and the courts, have been discouraged from acting as "monitors, critics, and reformers of the regulatory structure." 49
Congress and the President share responsibility for the regulatory process. Congress exercises its share of this responsibility through the enactment of regulatory statutes, control of appropriations, and oversight.

The quality of its performance in these respects varies greatly, however, particularly because the dispersed nature of its leadership and political composition makes difficult the achievement of sustained and consistent attention to regulatory programs. The independent commissions, considered by legislators as "arms of the Congress," contribute materially to Congress' ability to involve itself in the minutia of administrative regulation, but also demonstrates its corresponding inability to provide the type of leadership that administration of complex programs requires.50

Congress' own actions in making the commissions independent has meant in many cases independence from Congress itself. Congress' response to this has been a tendency to meddle in procedural matters and to intervene in the regulatory process on the behalf of favored interests. At the same time, Congress has failed to work out a consistent approach or definitive solutions to the problems posed by the regulatory process.51 This has resulted in often contradictory and arbitrary behavior by the regulatory commissions.

The President's responsibility with regard to regulation consists primarily of policy formulation and achieving an enactment of policy. Commission independence insulates them from many of the President's attempts at persuasion.52 Additionally, demands for action in the regulatory arena have been sporadic and unfocused, due to its arcane and remote nature to even well-informed citizens.53

The courts, while in a position to block many regulatory agency policy decisions have rarely chosen to do so. Partially this is a
result of the similarity of policy views between administrators and judges, and partially it is the "result of . . . years of agency experience in cultivating consensus by throwing issues up to the courts in forms and degrees that will elicit judicial approval or at least acceptance." In general, what a regulatory agency decides will be approved by the courts.

The abdication of these other institutions to a continual monitoring of the regulatory commissions has left the commissions generally free to go their own way. And their own way has meant that regulation has been almost entirely passive and reactive in nature.

It has done little on its own initiative, but rather has responded to the initiatives of others—usually complaints involving regulated firms. Regulatory agencies have viewed their role almost entirely as a judicial one. Thus, they generally act as mediators . . . between conflicting private interests rather than active determinants of the public interest. Commission policy is determined not by long range policy planning, but by ad hoc decisions on matters brought before them by outside interests. The policy agenda is not determined by the commissions, but by others.55

Regulatory commissions are also endowed with considerable discretionary powers. This power springs from two sources, the vague and ambiguous mandates given the regulatory agencies, and the judicial and quasi-judicial nature of the administrative processes of the agencies.

With regard to the vagueness of agency mandates, the problem is that the agencies are told to regulate in the "public interest," without specific guidelines as to what that interest is or should be.
As Kenneth Davis has expressed it: "Sometimes telling the agency to do what is in the public interest is the practical equivalent of instructing it: 'Here is the problem, deal with it.'" 56 "The statutes from which the agencies derive their authority are so often couched in broad general terms" as to endow them "with a discretion so wide that they can offer more or less plausible explanations for any conclusion they choose to reach with respect to . . . the matters coming before them." 57 Lacking clear guidelines pertaining to the public interest, it is not altogether surprising that the regulatory agencies should find this interest most clearly expressed as the interests of the segment of the public before them—the regulated interests.

The emphasis on a judicial, case-by-case approach to decision-making has encouraged this head-in-the-sand attitude toward the public interest. A chairman of a regulatory agency has been quoted as saying that:

> I think that several of my fellow members see themselves every day . . . as if they were judges. Instead of trying to develop basic programs for the industry they feel they have to make every decision on an ad hoc case-by-case basis. It is hard to elevate them to look at national policy. 58

Finally, Kenneth Davis, an expert on administrative law, has noted that

> . . . many federal . . . administrators are concerned primarily with problems of justice for individual parties and only secondarily with the formulation of general policy. Perhaps more than three quarters of the eighty thousand formal adjudications in federal agencies each year involve no greater degree of policy determination than average degree of cases in the federal courts. 59
Without generalized policy rules which link the agency decision-makers to the broader aspects of regulatory issues, the tendency is to make decisions on the merits of the individual cases, which by and large tend to involve only the interests which are most directly concerned. While independence and discretion are implicated in the lack of policy direction in regulatory agencies, there is a question of whether these two forces alone can compel agencies to move toward domination by the regulated interests. This paper assumes that these factors are not in themselves sufficient to lead to such a development. Therefore, this matter will be taken up again in the next chapter, where the causes and consequences of regulatory "life cycles" will be explored.

Reforming Regulation

This brief review of the issues involved in the regulatory arena indicates that the problems of regulation are of far-reaching importance. Because of its broad ramifications, regulatory policy has often been a battlefield in the national government. Often, however, the complexity of the issues have neither been fully understood nor appreciated by potential reformers or by the defenders of the regulatory status quo. In general, through much of the debate which has dominated the sporadic attempts to resolve satisfactorily the issues, regulation has been treated as an insulated technical activity. The implication has been

... that regulation is a legal function that can be protected from the contamination of other government activities. This ... assumption has been so imbedded that most ... debate has ... overlooked three significant features of the regulatory process: first it is inherently a political activity ...; second,
the regulatory functions are too intertwined with a host of other government activities to be set as a class apart; and third, while procedural problems are important, they are subsidiary to the objectives and accomplishments of the regulatory functions.61

The emphasis on procedural matters which has been characteristic of regulatory reform efforts fails to strike at the heart of many of the issues of regulation. But, Congress has shown a special willingness to consider favorably suggestions for procedural reforms.62 The Presidency has also been subject to this same weakness. A brief review of governmental efforts to reform regulation points up this bias toward primarily procedural revisions.

Modern concern with regulatory policy dates from the Brownlow Committee Report of 1937, written during the administration of President Franklin Roosevelt. A Brownlow Committee proposed the integration of executive branch programs, including those of the regulatory commissions, into functionally related clusters to be allocated among twelve cabinet departments. Departmentalization was the Committee's answer to its own charge that the regulatory commissions be abolished and their functions transferred to the executive departments.63 In 1949, the First Hoover Commission found that regulatory commissions "have a proper place in the machinery of our Government, a place very much like that originally conceived, but . . . the role of these commissions as originally established has not been adequately fulfilled."64

The Commission suggested a number of comparatively minor procedural and organizational changes.65 The third governmental study to examine the regulatory commissions was the Report of the Second Hoover Commission in 1955. This commission emphasized the "improvement of internal
procedures and separation of prosecuting functions from the functions of decision." The report also proposed creating an administrative court with specialized sections for taxes, trade, and labor. The main thrust of the approach of the Second Hoover Commission was to increase the judicialization of the regulatory commissions. In 1960, James M. Landis presented a report on the regulatory agencies to President-elect Kennedy. The Landis Report repeated some familiar proposals, but advanced into new territory by stressing that the "prime key to the improvement of the administrative process is the selection of qualified personnel." Landis argued for increasing the salaries of commissioners and staff, and for longer terms for commissioners. Landis also suggested that an Office for the Oversight of Regulatory Agencies should be created within the Executive Office of the President for the purpose of stimulating policy formation by the commissions and gearing them to cooperate more effectively with the President. In spite of some new ideas, however, the Landis Report did little more than rehash previous arguments for procedural reforms.

A more recent (1971) study of regulatory problems is the report of the President's Advisory Council on Executive Organization, also known as the Ash Council. In its final report, the Ash Council argued that the performance of the regulatory agencies has been unsatisfactory because of the organization of regulation: "the place of the agencies in the governmental establishment and the structure of the agencies themselves." In this report, the Ash Council did little more than repeat the conventional wisdom: "Thus, the assertions of commission failure are based mainly on undocumented judgments and on similar assertions made by others over the years." Congress has
recently taken up regulatory reform, but interestingly, although not unexpectedly, the major action to date has been to consider legislation to set up still another commission to study recommendations for reform. 72 The chief Congressional action with regard to regulatory reform has been the Administrative Procedures Act of 1946. This act, which was hailed as being a curative for the problems of regulation, turned out to be concerned with procedural problems almost exclusively, as it dealt "with procedures for enunciating rules, instituting and processing cases, holding hearings, and issuing decisions." 73 Most of the major problems of regulation, which are not procedural in nature, were ignored in this legislation.

In short, governmental attempts to reform regulation have been largely ineffective. One of the reasons for this ineffectiveness has been the reliance on impressionistic thinking in place of empirical studies of regulatory operations. 74 This is not surprising in light of the absence of empirical studies which adequately address crucial regulatory issues. Bernstein argues that research should be conducted which includes such variables as

... organization structure; political sensitivity of policy issues; the relative importance and use of adjudication and formal rule-making processes; the utilization of negotiating devices and other conventional administrative methods; degrees of discretion exercised by various levels and types of agency personnel; the relative autonomy or interdependence of regulatory programs; the nature and role of interest groups; the structure and character of regulated firms and industries; the significance of political leadership in maintaining progressive revisions of goals and policies and in molding the character of regulatory programs; the nature of Congressional involvement and concern; the role of catastrophe and crisis ... and the impact of international considerations. 75
This is a formidable agenda for research, and no single work can undertake to consider all of these variables. Many of them will appear, however, in the examination of the agency life cycle concept to be undertaken in this paper.

**Regulation is Here to Stay**

In spite of the ease with which would-be reformers offer facile solutions to the regulatory "mess," the prospects for a quick or painless exit of governmental regulation are non-existent. In fact, in spite of the recurrent dissatisfaction with regulation in general, the current trend appears to be moving toward more regulation rather than toward less. This is because of the emergence of "strong public sentiment for policy reform in a variety of matters involving protection of public health and safety and the environment,"76 and because of consumer demands for aid and assistance in an increasingly complex product market.

Given the rapidly growing varieties of goods and services available, the imaginative new marketing techniques, and the increasing technical complexity of consumer goods, consumers will have less time and less relative ability to judge the quality of their purchase options. This situation would seem to call for more rule-making by federal agencies in the area of consumer goods and services.

The recent ban on Red Dye Number 2 is a good example of the kinds of decisions that consumers have neither the technical knowledge nor the ability to make and for which they must depend on the wisdom of experts. Regulation does perform some needed services in society which, as Downs argues, cannot be performed by market-oriented organizations. Regulation is one of the functions which must be fulfilled by governmental organizations.78
There is also no reason to expect that large, influential segments of the business community will press for any more than symbolic activity aimed toward the elimination or modification of regulation. At first glance, this might seem paradoxical, given the myths of the business community concerning the alleged advantages of a free, competitive market economy. However, large corporations are usually the benefactors of current regulatory policies, and they are unlikely to want to be reformed out of their advantageous position. Holton suggests that most of the opposition to regulation today comes not from secure and powerful large businesses, but from small businessmen who perceive themselves as harassed unduly by federal activities. Small businessmen are scarcely in a position to sustain a lengthy attack on regulation without the assistance and support of large business. Given the situation, such support is likely to be reluctant, if given at all. Consequently, regulation in more or less its present form is likely to be present for the foreseeable future.

The expectation of "business as usual" in regulation should not be interpreted as an argument that the study of regulation should be abandoned as useless. Quite the contrary. Real progress in the modification of regulatory policy to achieve desired social objectives demands more research into what is still an ill-understood area of governmental behavior. Regulation cannot be denied or ignored, but it can be understood and perhaps modified.

Regulation, Public Power, and the Rigidity Cycle

Nearly a hundred years after the establishment of the first regulatory commission, the issues of regulation are still lively and have
important policy implications. This chapter has discussed some of the major aspects of regulation as it is practiced at the federal level. The chief conclusion has been that the issues involved in regulation are complex and far-reaching, and do not admit of such simplistic solutions as "eliminating regulation." Theodor Lowi has made a strong critique of pluralistic democracy which is relevant to the points raised in the present discussion. Lowi argues that large institutions, such as business organizations, have penetrated the political process in America to such an extent that only the most successful of established interests receive a genuine hearing when social values are allocated. Trade-offs and distribution are controlled by institutional centers and the poor, the unorganized, and the powerless are left out. As a result of this "capture" of the political process by institutional interests, Lowi sees the replacement of legality and authority in the political system with "bargaining" and the parceling out to private parties the power to make public policy. Such an abdication of authority to private interests has led, in Lowi's view, to the decline of legitimacy in the polity. Failing legitimacy in turn leads to the slow decline of democracy, even though the outward symbols of democracy are maintained.

The regulatory agencies, orginally formed to save and protect the public, have succumbed to the parochial desires of a small but influential segment of that larger public. The domination of the regulatory agencies of the regulated interests serves as a microcosm of the larger problem of the capture of the political process by institutional interests. Regulatory agencies can be viewed, as we have tried to show in this chapter, as classic examples of the kinds of
failings of which Lowi, as well as others cited in this chapter, have written. While the solutions to the problems raised are obviously not simple, hope should not be abandoned. Instead, empirical research is needed in many areas about which little is yet understood. One of these areas is the relationship of regulatory agencies to the regulated interests, especially that extreme form of relationship which we have been calling agency "capture."

This paper will consider the problem of "capture" by examining what is considered to be a major causal factor—an inherent "rigidity cycle" of regulatory organizations. Two theories of this cycle will be examined in some detail, and from this examination a series of propositions will be derived for further empirical testing, on the assumption that it is necessary to demonstrate the existence of such a cycle before conclusions can be reached concerning its effects. This approach will allow the use of an organizational perspective on the problems of regulation. Viewing regulatory problems as symptoms of underlying organizational problems can be a fertile source for the generation of new ideas and perhaps new solutions for the problems we have raised. Certainly, an organizational approach will add a new dimension to understanding governmental behavior with respect to regulatory activities.

The following chapter discusses in some detail the agency "rigidity cycle." Later chapters describe the measures employed to test a series of propositions derived from the theory of the rigidity cycle, and discuss the analysis of empirical data. The concluding chapter states the findings of the research, and suggests areas where attention should be concentrated in order to rechannel regulatory be-
havior into paths which are socially and politically more productive.
FOOTNOTES


3 On February 6, 1976, the House of Representatives passed a measure that would lift federal price controls from about 3,500 independent producers, while retaining control on about 30 of the largest producers. "Independents Critical of Natural Gas Decontrol," The Houston Post, Feb. 7, 1976, p. 8E. The debate on the passage of this measure centered around the costs of eliminating the authority of the Federal Power Commission to set ceilings on the wellhead price of natural gas sold in interstate markets. Opponents have asserted that such deregulation would boost home consumer fuel bills by as much as $94 a year. Art Weiese, "Deregulation Passes Test," The Houston Post, Feb. 4, 1976, p. 1A.

4 See, for example, the remarks of regulatory agency officials in Regulatory Reform—1974, Hearings before the Senate Committee on Government Operations, 93rd Cong., 2d Sess., pt. 1 at 30 and passim (1974).

5 Ibid., p. 48


7 Weekly Compilation of Presidential Documents, XI (October 6, 1975), pp. 1097-1098.

8 Ibid.

9 McCraw, in his valuable review of the literature on regulation, notes that the idea of "capture" appeared early in the history of re-regulation and has persisted to the present. According to McCraw the "capture" thesis has in the 1970's neared "the status of a truism, a cliche of both scholarship and popular perceptions." Thomas K. McCraw, "Regulation in America: A Review Article," Business History Review, XLIX (Summer, 1975), 160. The fact that the "capture" thesis has reached the status of a truism should not conceal the need to test the concept operationally.


13 Ibid.

14 [T]he most important characteristics of regulatory agencies—independence and a judicial atmosphere—came about largely by accident. The first commission—the Interstate Commerce Commission (ICC)—was orginally part of the Department of the Interior; however, friction between the senator who guided the legislation establishing the ICC and the Harrison administration, combined with the desire of the Secretary of the Interior to avoid responsibility for the ICC, led to its redefinition as an independent agency. The ICC’s first chairman, a respected jurist, was responsible for establishing the formal procedures of the ICC, and the Congress did not attempt to interfere." Roger G. Noll, *Reforming Regulation: An Evaluation of the Ash Council Proposals* (Washington, D.C.: The Brookings Institution, 1971), p. 35.


17 Adopted from Ibid., p. 60.

18 McCraw provides a helpful summary of the approaches various disciplines—history, law, economics, and political science—have taken toward describing and explaining regulatory policy. See McCraw, "Regulation in America," passim.


22 Ibid.

23 Allan G. Gruchy, "Government Intervention and the Social control of Business: The Neoinstitutionalist Position," *Journal of Economic Issues*, VIII (June, 1974), 236. Gruchy identifies Milton Friedman and others of the "Chicago School" as decentralists. The institutionalists, or the "majority orthodox," were said by Gruchy to include John M. Clark, Wesley C. Mitchell, and Rexford Tugwell. Gruchy implies that this group also includes Carl Kaysen, Donald Turner, and Paul S. Samuelson. The neoinstitutionalists include Clarence E. Ayres, Gerald Colm, John Kenneth Galbraith, and Gunnar Myrdal.

24 Ibid., pp. 236, 237.
25 Ibid., p. 237.

26 Ibid., p. 238.

27 Ibid., p. 242.


30 Salamon and Wamsley phrase this as a problem in bureaucratic responsiveness, "The real issue concerning bureaucratic responsiveness, therefore, may not be whether the bureaucracy is responsive, but to whom and under what circumstances." Lester B. Salamon and Gary L. Wamsley, "The Federal Bureaucracy: Responsive to Whom?" in People vs. Government: The Responsiveness of American Institutions, ed. by Leroy N. Rieselbach (Bloomington, Ind.: Indiana University Press, 1975), p. 152. Salamon and Wamsley implicitly classify the problems of public and private power under the heading of bureaucratic responsiveness. In this paper, the problems of power and of institutional responsiveness are considered separately, although, it must be emphasized, they are quite closely related.

31 Noll, Reforming, Reforming Regulation. The critical literature on regulation by economists is enormous. Noll's summary of the bulk of this literature seems to represent adequately most of the major economic criticisms of regulation.

32 Ibid., p. 15

33 While Noll notes that the term "the public interest" is so vague as to be devoid of meaning, he promptly develops his own somewhat vague meaning for the term. Defining the public interest has been one of the major pasttimes in both the realm of regulatory policy and in more general discussions of American politics. No one has yet produced a definition or a conception which satisfies everyone, although many have tried. This problem is a real one for regulatory agency officials who have been charged with regulating in "the public interest" and have not been able to develop or obtain usable definitions of what this is. See pp. 21-23 for some further remarks on this problem. A good recent summary of the literature in political science concerning the public interest in clarke E. Cockran, "Political Science and 'The Public Interest,'" Journal of Politics, XXXVI (May, 1974), 327-355. See also the discussion of the public interest concept as it has been employed in regulation in McCraw, "Regulation in America," pp. 160, 161.
Noll, *Reforming Regulation*, p. 16.

Ibid., pp. 16-19.

Ibid., p. 19.

Ibid., p. 21.

Ibid., p. 24.

Ibid., p. 25.

Ibid., p. 25.

Ibid., p. 28.

Noll states, however, "In these cases the results are more controversial, and the proper extent of regulation more open to debate. Most of the alleged failings of regulation are of rules that have not been made and activities that regulators have chosen not to undertake. Such failures are difficult to prove and highly conjectural." Ibid., p. 28.

Murray L. Weidenbaum, "The Case for Economizing on Government Controls," *Journal of Economic Issues*, IX (June, 1975), 205, 206. Some evidence of the magnitude of the distortions which economists have attributed to current regulatory policy can be seen in some figures for just one area of regulatory activity, that of freight transportation regulation. Thomas G. Moore has estimated, under a varying mix of assumptions, that in one year the economic losses due to regulation in the freight transportation industries is somewhere between $4 billion and $9 billion. His most conservative estimate is given in Table 1-3.
### TABLE 1-3

**ESTIMATE OF THE ECONOMIC LOSS FROM ICC REGULATION IN 1968 ($ millions)**

<table>
<thead>
<tr>
<th>TYPE OF LOSS</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inefficient Use Of:</td>
<td></td>
</tr>
<tr>
<td>Common Carrier Trucks</td>
<td>1,400</td>
</tr>
<tr>
<td>Private Trucks</td>
<td>100</td>
</tr>
<tr>
<td>Rails</td>
<td>1,700</td>
</tr>
<tr>
<td>Water Carriers</td>
<td>200</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>3,400</td>
</tr>
<tr>
<td>Loss from Traffic Carried by:</td>
<td></td>
</tr>
<tr>
<td>Trucks Instead of Rails</td>
<td>200</td>
</tr>
<tr>
<td>Water Carriers Instead of Rails</td>
<td>a</td>
</tr>
<tr>
<td><strong>Loss from Traffic Not Carried</strong></td>
<td>175</td>
</tr>
<tr>
<td><strong>Total Estimated</strong></td>
<td>3,775</td>
</tr>
</tbody>
</table>

**SOURCE:** Adopted from Thomas G. Moore, "Freight Transportation Regulation," in *Regulatory Reform--1974*, Hearings before the Senate Committee on Government Operations, p. 582.

*Not estimated.*


Much of the discussion following in the text centers on the importance of various factors relating to the differential responsiveness of the independent regulatory commission. The difference between non-independent regulatory agencies and the independent commissions remains largely unexplored at the present time. Some speculation on these differences has, however, been offered. Marver Bernstein suggests that regulatory programs in independent commissions are analogous to regulatory activities of departments and other agencies. "Available studies and reports of the programs administered by the independent regulatory commissions suggest strongly that variations among commissions in terms of policies, political contexts of regulation, and sensitivity of political issues are probably more significant than structural similarities." Marver H. Bernstein, "The Regulatory Process: A Framework for Analysis," *Law and Contemporary Problems*, XXVI (Spring,
1961). 342. Ira Sharkansky makes a similar observation when he notes that it "is possible to exaggerate the uniqueness of the independent regulatory commissions. Other units within cabinet departments or independent offices likewise make rules, apply their own rules to specific cases of business regulation, and hear appeals from dissatisfied firms..." Ira Sharkansky, Public Administration: Policy-Making in Government Agencies (Chicago: Markham Publishing Company, 1970), p. 89. This paper includes an examination of the differences between independent commissions and non-independent agencies with respect to the issues under consideration—agency "life cycles" and agency "capture" by regulated interests.


48 Ibid.


52 Hall, "Responsibility of President and Congress," p. 259.

53 The President may also be uninterested in regulatory matters because of the lack of political gains to be made by paying serious attention to them. Noll, Reforming Regulation, p. 36. See also William L. Cary, Politics and the Regulatory Agencies (New York: McGraw-Hill Book Company, 1967), esp. 5-26.

54 Shapiro, Supreme Court and the Administrative Agencies, pp. 266, 267.


57 Ibid.
58 Carey, Politics and the Regulatory Agencies, p. 66


60 The regulated interests also have an advantage in this process because "regulatory decisions frequently are made on the basis of industry figures and forecasts... In the area of product-testing, regulators must depend heavily on the results of industry tests. In fact, given the magnitude of the tasks assigned to them, many agencies must depend on the good will and intentions of the industry... in order to accomplish the mission assigned to them." Leone, "Public Interest Advocacy," pp. 49, 50.


62 Heady and Linenthal, "Congress and Administrative Regulation," p. 159. John E. Moore sees a "curious tendency... to distinguish the shortcomings of the regulatory process from those of the political system of which it is a part," and to ascribe such shortcomings to the structural or procedural characteristics of the regulatory process. Moore refutes the "structural reform" approach, arguing that much of the malaise associated with the regulatory process is a result of the same forces that have tended to increase dissatisfaction with the political system in general. In his view, "responses based... upon structural or procedural reforms are more likely to compound than to reduce this dissatisfaction." John E. Moore, "Recycling The Regulatory Agencies," Public Administration Review, XXXII (July/August, 1972), p. 291. Congress, being deeply embedded in the present system, is unlikely to view the prospects for procedural reform as negatively as does Moore.


64 Ibid., p. 16

65 The Commission proposed to vest administrative responsibility in the chairmen of commissions and to make commissioners removable for cause. "Other proposals included increases in salaries for commissioners and staff members, delegation of minor matters to staff members, and the removal of specified 'executive functions' from commissions. In addition, the commission urged that the Bureau of the Budget study ways to promote speedy disposition of regulatory matters," Ibid., p. 17.

66 Ibid.

67 Ibid.

68 Ibid., p. 18.
Ibid., pp. 18, 19.

Noll, Reforming Regulation, p. 4.


A lack of empirical study, says Bernstein, causes us to "fall back on our value preferences concerning the role of government in economic life, on the biases of our professional affiliations, and on assertions by others that support our personal conceptions and conclusions," Bernstein, "A Perspective on Reform," p. 21.


A typical "solution" of this sort is offered by Kohlmeier, "The independent regulatory agencies as they presently exist should be abolished, and the powers of each should be carefully reexamined. Those promises and powers in their laws which do not conflict with competitive principles and antitrust statutes should be distributed among the three branches; those that do conflict should be repealed." Louis M. Kohlmeier, Jr., The Regulators: Watchdog Agencies and the Public Interest (New York: Harper and Row, 1969), p. 290.

CHAPTER II

THE LIFE CYCLE OF REGULATORY AGENCIES

A Theory with Broad Appeal

The previous chapter has indicated the extent and importance of some of the broad issues relating to regulatory policy in the United States. While the issues examined were complex, at least one unifying thread appeared throughout the discussion. This thread was a repeated condemnation of the relative success of the autonomous politics of the narrow constituency in replacing "public" goals with "private" goals in the context of regulation. While it was suggested that there might be multiple reasons behind this alleged replacement, reference was also made to a conceptual model purporting to explain this failure of the regulatory agencies. This model has been applied with considerable frequency in almost all of the disciplines which have concerned themselves with regulation. As presently employed, this model has two components. The first is the idea of a characteristic organizational "life cycle" intrinsic to the regulatory agencies. The second component is the idea that the culmination of this "life cycle" is the "capture" of the regulatory agency by the regulated interests, "capture" meaning that the regulatory agency has undergone a serious goal distortion wherein the needs and interests of the regulated industries become of first importance to the agency, while the needs and interests of the larger public are neglected.¹

The presumed existence of a regulatory agency "life cycle" ending in agency "capture" has become the conventional wisdom in the literature concerning regulation.² The "pessimistic metaphysical pathos" of
the life cycle has had a unique appeal, primarily because it has seemed such a clear and satisfying explanation of contemporary experience. The concept has apparently so satisfying that it has never been subjected to a serious, rigorous test. To remedy this omission, this paper examines two theories of organizational development appropriate to the regulatory context and subjects them to empirical testing. The first of these theories, developed by Marver H. Bernstein, relates specifically to the development of regulatory agencies and attempts to set forth and explain the process whereby such agencies become the "captive" of the interests they purport to regulate. The second theory, the work of Anthony Downs, is a more general discussion of organizational life cycles, independent of particular policy concerns. This chapter discusses these two models, with the end of developing a synthetic view. From this synthetic model components suitable for operationalization and testing will be derived.

Bernstein: The Life Cycle of the Regulatory Commissions

As noted in the previous chapter, Marver Bernstein developed his theory of the life cycle of the independent regulatory commissions in a 1955 book called Regulating Business by Independent Commission. In this book, Bernstein argues that independent regulatory commissions follow a historical pattern which is generalizable across all the commissions, even though the particular pacing of the pattern may vary from agency to agency. According to Bernstein, the life of an independent regulatory commission can be divided into four phases: gestation, youth, maturity, and old age.
Gestation

Initially a struggle develops within society over to the proper solution to a problem which is creating stress. Reform elements agitate for corrective legislation while opposition groups attempt to maintain the status quo. Over a period of time, the struggle for reform is climaxed with some form of regulatory legislation. In general, this legislation is vague and concerned mainly with eradicating abuses:

"What is wanted is immediate relief from an intolerable situation, not the development of a philosophy for ordering economic relations. It is the short-run, rather than the long-term, implications of regulatory policy which preoccupy the advocates of regulation." Because of the long lead time involved in establishing a regulatory agency, the first statute is likely to be dated at the time of its enactment. Consequently, the battle to adopt regulatory policy and practices to current problems will be fought through subsequent decades.

Youth

The establishment of the regulatory commissions pits it against well-organized and hostile interest groups which have the intention of blocking the influence of regulators in the group's affairs. In spite of this opposition, or perhaps because of it, the agency ordinarily begins its career in a crusading spirit. The agency views its responsibilities broadly and young agencies are dominated by the qualities of youth—energy, ambition, and imagination.

During the period of youth, the agency must count on a rather rapid loss of support from the public, and from the President and Congress. Bernstein attributes this to several causes:
1. The public has a short attention span. When the decision to regulate is made, pro-regulatory groups regard the struggle as won, and lose further interest. ¹¹

2. The public believes administration automatically follows from legislation. That is, once the regulatory acts are passed, "regulation" is therefore accomplished. ¹² The often symbolic quality of regulatory legislation is overlooked.

3. "The necessity to defend its powers and methods in the courts forces a commission to operate during its period of youth in a technical environment that defies general comprehension by the public." ¹³ The arcane nature of many regulatory issues cannot be easily explained to or apprehended by the general public or by non-specialists. What cannot be understood is often dismissed as unimportant or ignored.

4. Regulated groups succeed in influencing the appointment and perspectives of the commissioners. Either "sound men" or appointed, or unfriendly commissioners are subjected to continuing hostility until they resign or are not reappointed. The opportunity to secure an executive post with a firm subject to regulation may restrain some commissioners. ¹⁴

5. Congress cannot sustain the political animosities of the period of the struggle over deciding whether to regulate and continue to function effectively. Consequently, regulatory matters tend to be shunted onto the Congressional back burner. ¹⁵

6. The "cohesiveness of industrial groups cannot be matched by the inchoate, relatively unorganized (and frequently disorganized) public. Consequently the new commission may be left in splendid isolation. . . ." ¹⁶
Overall, Bernstein states, most regulatory commissions initially try to achieve real independence from the regulated groups, but rarely attain this goal. "They have embarked on the regulatory task with some exuberance and with a desire to clarify goals and mark out basic policies. But the characteristics of youth have only transitory existence and soon fade away."\(^{17}\) This loss of youthful bloom means hard times for the agency as it heads toward maturity.

**Maturity: The Process of Devitalization**

The spirit of controversy fades from the commission as it comes to rely on settled procedures and reconciles itself to fighting its own political battles. During this period the agency begins to take an approach to regulation which resembles that of business manager for the regulated industry. The commission increasingly concerns itself with the general health of the industry and tries to prevent adverse changes. "Cut off from the mainstream of political life, the commission's standards of regulation are determined in the light of the desires of the industry affected."\(^{18}\)

The mature commission is also notable for a passivity that borders on apathy. The procedures of the commission become heavily judicialized. Important developments also take place concerning staff, work load, and appropriations.

1. **Staff:** The spirit of professionalism becomes entrenched and competing professional groups tend to cancel one another's policy proposals.\(^ {19}\) Dependence on predecence thus becomes overwhelming.

2. **Work Load:** Agencies tend to get further and further behind with the emphasis on slow judicial procedures. Such backlogs cause the agency to neglect policy planning and to concentrate on what has
been done in the past.

3. Appropriations: Congress and the Presidential budget office tend to be indifferent to providing increased resources to the commissions for the purpose of reducing backlogs. The existence of such backlogs reduces confidence in the commissions as well-managed agencies. This results in reduced appropriations and a cycle of budgetary decline.

The end result of the isolation and passivity of the regulatory commissions is, according to Bernstein, political acquiescence.

The close of the period of maturity is marked by the commission's surrender to the regulated. Politically isolated, lacking a firm basis of public support, lethargic in attitude and approach, bowed down by precedence and backlogs, unsupported in its demands for more staff and money, the commission finally becomes a captive of the regulated groups. 20

Old Age: Debility and Decline

As they move into old age, independent regulatory commissions seem more susceptible to inertia and lost of vitality than other types of agencies:

As multi-headed agencies normally cut off from continuing political support from the chief executive, they tend to lack dynamic administrative leadership. As government agencies operating in a web of controversial and hostile economic relationships, they tend to relate their goals and objectives to the demands of dominant interest groups in the economy. Ignored or abandoned by an unorganized public, commissions tend to play for safety in policy decision. Passivity deepens into debility.21

During old age, the commission has no creative life force left to mobilize against the regulated groups, and its primary mission becomes "the
maintenance of the status quo in the regulated industry and its own position as recognized protector of the industry." Additional indicators of senescence are the continuing decline of appropriations, poor management and doubt about regulatory objectives, and "the failure of regulatory objectives to keep pace with changes in technology, economic organization, and popular views about the proper scope of governmental activity."\(^{23}\)

The most important result of old age is agency apathy toward the public interest. Apathy goes hand in hand with the surrender of the agencies to the regulated industries. In Bernstein's view, "acceptance by government officials of an alliance with regulated groups in an abdication of responsibility and must be considered a blow to democratic government and responsible political institutions."\(^{24}\)

**Comments**

Bernstein's life cycle model is at first glance quite appealing, answering as it does the question of why regulatory agencies initially resolute in their intentions gradually fade into amiable adjuncts of the regulated interests. In any general schema of this sort, however, difficulties are bound to appear. Bernstein's conceptualization is no exception. Most of the problems with Bernstein's approach appear in the category of omissions, not so much as what he discusses as what he fails to discuss. For example, Bernstein gives no indication of why some regulatory procedures are undertaken by the creation of independent commissions while others are assigned to the various sub-units of already existing executive agencies. There are probably functional reasons for many such assignments, but as has been indicated elsewhere in this paper, much of this depends on chance
historical factors.

Along these same lines, Bernstein is not clear about the differences between the regulatory cycle in independent commissions and in executive agencies. He implies that all agencies are subject to the aging process (by virtue of not excluding any in his remarks on the matter), but that the independent regulatory commissions are more so. In this the only difference, or is there any difference? This omission does not allow the determination of whether agency capture is inherent in the nature of the task (regulation) or in institutional factors (e.g., independence). As a result of this ambiguity, one cannot be sure if Bernstein meant his theory to be applicable only to the independent regulatory commissions, or to include the regulatory units of executive agencies, e.g. the Food and Drug Administration, the Agricultural Marketing Service, National Transportation Safety Board, and so on. Another problem in Bernstein's work is inattention to causal factors creating differential response in different agencies. Bernstein assumes that all independent regulatory commissions go through the life cycle, although the rate at which it proceeds is different for each agency. What might account for this variation across agencies is not treated. This is a significant question. The differential rate of maturation is critical if it is viewed as desirable to prolong the youth of the agency--that period when it seems most responsive to interests other than those of the regulated.

In spite of an effort to differentiate them, Bernstein has not really managed to separate maturity and old age. There really seems to be little difference between the two as Bernstein has described them
other than in old age there is simply more of the same—stability, 
passivity, acquiescence—as there was in maturity. Bernstein hews too 
closely to a model of the development of the individual human rather 
than thinking in organizational terms. Organizations can be re-
vitalized and return to the characteristics of youth, a feat that a 
senescent human cannot accomplish. Bernstein admits, but never fully 
develops this possibility.  

To summarize: Bernstein argues that independent regulatory 
commissions go through a four-stage life cycle, the first two stages 
dominated by contention between the regulated and the regulators, and 
that the last two marked by a mutual accommodation which works to the 
narrow advantage of the regulated interests. Bernstein does not 
adequately distinguish between independent commissions and other regu-
latory bodies, and variations in performance are not treated or 
explained. 

Downs: The Life Cycle of Bureaucratic Organizations 

Some of the more generalizable attributes of Bernstein's con-
ceptualization of the regulatory commission life cycle can be subsumed 
under the broader theory of the life cycle of public bureaus developed 
by Anthony Downs. The congruence between Bernstein and Downs' con-
ceptualizations will allow the drawing of broader conclusions from the 
empirical study to be undertaken.  

Downs' theory of the life cycle of public organizations is summarized in the following paragraphs. 

The major causal underpinning, according to Downs, of the growth 
and decline of bureaus is the presence of exogenous factors in the 
bureau's environment rather than any purely internal developments. 
These "exogenous factors" are mainly the bureau's need for political
support and the results of the bureau's solicitation of such support. "No bureau can survive unless it is continually able to demonstrate that its services are worthwhile to some group with influence and sufficient resources to keep it alive." Therefore, the youth of a bureau is spent in developing automatic generators of support because bureau survival is dependent on such support. Officials in new bureaus place a high priority on creating conditions which will insure the bureau's survival, even when their primary goal (as it often is in the early stages of bureau life) is altruistic—the performing of the bureau's social function(s).

The early life of the bureau is critical for its survival. It must reach the minimal size and age levels which allows the bureau to be large enough to render useful services, and old enough to have established routinized relationships with its major clients. A bureau is vulnerable between the time of its origin and immediately before it attains its initial survival threshold. At that point the bureau may not have generated enough external support to resist severe attacks. The critical variable here is what Downs calls the power setting of the bureau: "If its suppliers or beneficiaries are strong and well organized in comparison with its rivals and sufferers, then it will probably quickly gain a clearly autonomous position."28

Downs describes a dynamics of growth for bureaus. Growth is accelerated when the social functions of the bureau become more important, or it is created when there is a high demand for its function. This growth will spur those officials whom Downs designates as "climbers" into the organization. The innovativeness and aggressiveness of these "climbers" will spur the organization to broaden its functions so
as to grow and create more opportunities for advancement. This type of growth is rapid for a while, but soon other factors come into play which act as growth inhibitors. These include:

1. Resistance to the expansion of the bureau's function by other allocational rivals.

2. Resistance to the expansion of the bureau's function by other functional rivals.

3. The difficulty of continuing to produce impressive results as the organizations increases in size and unwieldiness. The best talent in the bureau is diverted from action to administration.

4. Conflicts among "climbers" who move to fast-growing bureaus result in the devotion of a higher proportion of their efforts into internal policies and rivalries.

Once these factors inhibit bureau growth, another effect appears. This is the process of deceleration, which occurs when the bureau is forced to reduce its membership due to a drop in the relative significance of its social function. Such a decline signals a change in the make-up of the bureau's personnel. "Climbers" seeking increased power and prestige will move to other agencies which are still growing and the bureau they leave behind will then become dominated by those whom Downs describes as "conservers." This change will reduce the ability of the bureau to innovate and its desire to expand functions. This effect, however is not completely symmetrical with the growth accelerators because the bureau will resist losing acquired positions. Therefore, the overall course of the bureau is more like a "ratchet movement... than a smooth up and down curve."29

As bureaus grow older, the Downsian model predicts that certain
Often, due to the absence of any explicit relationship between costs and benefits, the bureau's members can often keep the organization alive when it ceases to return any real benefits to society. This contributes to bureau longevity. 34

Comments

Downs' more general model of the bureaucratic life cycle overcomes one of the major weaknesses apparent in Bernstein's regulatory model. Downs' conceptualization presents some measurable internal variables which indicate when an agency has reached maturity. Bernstein's indicator of maturity and of subsequent old age is the dominance of the regulated interests over the agency. In effect, Bernstein creates a tautology: When an agency is "captured" it is mature, it is mature when it is "captured." Downs escapes this pitfall by developing specific indicators of agency maturity that are not directly related to the attitudes of the agency toward its clientele. Downs' indicators relate instead to the movement of personnel in and out of the agency, the expansion of agency size and function, and the change in emphasis within the agency from action to administration. Downs also places stress on the relative importance of the psychological predispositions of bureau members in his life cycle model. He attributes the dynamics of growth largely to exogeneous factors, such as differential rates of support for the agency, but he measures growth largely in terms of the distribution of "climbers" and "conservers" within the agency. Downs thus manages to make a connection between the external environment and the internal conditions of the agency in a more specific manner than does Bernstein. Unfortunately, the "climber"/"conserver" ratio is
difficult to measure, especially retrospectively. There are individual psychological traits and to determine the relative distribution of such attitudes would require a survey of bureau officials—an extremely difficult, if not impossible, task for agencies which have been in existence for more than a few years.

In general, Downs does not clearly differentiate between the different phases of the life cycle in his model. Although he specifically discusses the gestation of bureaus, he does not attempt any further demarcations such as those developed by Bernstein. He also seems more sensitive to the possibility that a bureau can have some of the characteristics of youth, maturity, and old age all at once, depending on whether it is attempting to revitalize itself by broadening its functions and its support during periods of crisis, or holding on to what it has gained in periods of tranquility. On the other hand, Downs never states how agencies can be "captured" or why in the regulatory case they tend to reach an exclusive accommodation with a single interest sector. He does note that if the bureau is designed to regulate or inhibit the activities of "powerful social agents," these will often seek "to capture the new bureau's functions themselves or suppress them altogether," but he does not explain when or why they are or might be successful in such efforts.\(^\text{35}\) Bernstein, in his discussion of the erosion of the support afforded regulatory agencies, does at least attempt to cover this vital point.

The models of agency life cycles posited by Bernstein and Downs are, on the whole, supportive more than opposed. Valuable insights can be derived from each. The next section attempts to synthesize the salient points of these two models with some related ideas drawn
from other sources. Table 2-1 on page 53 summarizes the major features of the models discussed to this point.

A Synthetic View

Two essential propositions can be derived from the conceptualizations of Bernstein and Downs. These are stated below, with some additional comments.

1. "Bureaucratic policy-making is the response of executive branch agencies to stimuli coming from their internal and external environments."36 Katz and Kahn were among the first organization theorists to draw attention to the importance of an organization's relationship with its external environment. They noted that

[t]raditional organizational theories have tended to view the human organization as a closed system. This tendency has led to a disregard of differing organizational environments and the nature of organizational dependency on environment. It has also led to an overconcentration on principles of internal organizational functioning, with consequent failure to develop and understand the processes of feedback which are essential to survival.37

More recent scholars have employed the concept of organizational response to the environment to explain the behavior of public bureaucracies. Warwick, for example, emphasizes the interaction between organization and environment in his theory of public bureaucracy.

Most studies, even of government agencies, have been essentially inner-directed, focusing on such conditions as size, functional complexity, and professionalization . . . . Here we argue that one simply cannot understand bureaucracy, or even explain much of an agency's organizational behavior, without considering such factors as congressional control, interest-groups pressures, and alliances between agency officials and various external actors. Internal factors are, of course, highly important, but they must be set in the larger context of agency-environment relations.38
<table>
<thead>
<tr>
<th></th>
<th>GESTATION</th>
<th>YOUTH</th>
<th>MATURETY</th>
<th>OLD AGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BERNSTEIN</strong></td>
<td>1. Reform groups agitate for regulation</td>
<td>1. Animosities of period of origin do not immediately disappear</td>
<td>1. Spirit of controversy fades</td>
<td>1. Passivity continues</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Private interests find ways of checking agency activity</td>
<td>4. Marked passivity</td>
<td>4. Poor management, doubt about regulatory objectives</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5. Developments concerning staff, work load, appropriations</td>
<td>5. Failure to keep pace with change</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6. Commission surrenders to regulated interest</td>
<td>6. Phase continues until emergency calls attention to failure of the commission</td>
</tr>
</tbody>
</table>

| **DOWNS**                | 1. Bureaus created in one of four different ways: | 1. Youth, maturity, and old age not clearly distinguished | 1. Passivity continues |
| Theory of Life Cycle of All Public Organizations | a. Routinization of charisma                 | 2. Every bureau initially dominated by advocates or zealots | 2. Commission becomes protector of industry |
|                          | b. Out of nothing by certain social groups  | 3. Bureau must attain initial survival threshold. It will be opposed by functional rivals or by powerful social agents if it tries to regulate or inhibit their activities | 3. Budgetary decline |
|                          | c. By splitting off from an existing bureau | 4. Character of power setting determines agency autonomy | 4. Poor management, doubt about regulatory objectives |
|                          | d. Zealot entrepreneurship                | 5. Accelerator-decelerator effect causes "ratchet movement" in bureau growth rather than smooth curve | 5. Failure to keep pace with change |
|                          |                                         | 6. Growth indicated by climber/conserver ratio | 6. Phase continues until emergency calls attention to failure of the commission |
|                          |                                         | 7. Specific effects of age* | 7. Youth, maturity, and old age not clearly distinguished |
|                          |                                         | 8. Law of Increasing Conservatism       | 8. Every bureau initially dominated by advocates or zealots |
|                          |                                         | 9. Age lumper phenomenon                | 9. Bureau must attain initial survival threshold. It will be opposed by functional rivals or by powerful social agents if it tries to regulate or inhibit their activities |
|                          |                                         | 10. Bureaus unlikely to die once they have attained survival threshold | 10. Character of power setting determines agency autonomy |
|                          |                                         | 11. Bureaus threatened with shrinkage or extinction will seek to develop new functions to prevent such eventualities | 11. Accelerator-decelerator effect causes "ratchet movement" in bureau growth rather than smooth curve |

*See text, p. 49.
Niskanen, in his theory of bureaucracy and representation, states that one of the fundamental characteristics of a public bureau is that it "offers a promised set of activities and the expected output(s) of these activities for a budget."\(^{39}\) This budget comes from external actors, such as Congress and the executive budget office. Consequently, the agency must please these actors. Downs, in his theory of bureaucracy, emphasizes the importance of a bureau's power setting in affecting the internal dimensions of bureaucratic structure.\(^{40}\) Finally, Herbert Kaufman, in what might be considered an organic theory of the overall evolution of organizations, suggests the importance of environmental factors in influencing organizational behavior.

Organizations are incapable of changing their structure or behavior in any but the smallest degree, and . . . how long they survive and how big they grow depend on chance variations in their relatively inflexible behavior and chance characteristics of the local environment in which they happen to occur.\(^{41}\)

The importance of environmental support in general for the organization leads to a more specific point concerning governmental agencies, and especially regulatory agencies.

2. Agencies are more or less "in the business of building, maintaining, and increasing their political support. They lend and in large part are led by the diverse groups whose influence sustains them."\(^{42}\) Or, as Francis Rourke states.

Diversification of support is as desirable for a government agency as product diversification is for a private firm . . . . The heterogeneity of an administrative agency's group support . . . seems to be more important in determining its freedom of action than how it is organized.\(^{43}\)
These two propositions re-emphasize the sources of the forces impelling agencies to move through the organizational life cycle as seen by Bernstein and Downs. Regulatory agencies, the argument goes, are forced into a pattern of accommodation with private interests because of their inability to gain sufficient support from the public, the executive, or Congress once the symbolic demand for regulation is satisfied and the agency becomes embroiled in obscure and routine tasks. The regulatory agencies must then seek to maintain organizational integrity and/or survival by cultivating political support where it is most directly available to them, from the regulated interests. The "aging" process, then, can be thought of as the successive abandonment or closure of other lines of environmental support to the agency and the almost total dependence on one primary source of input. This closure can never be complete as long as the agency must obtain some supports, such as budgetary approvals, from other actors, but it can be so predominant that it shapes the main pattern of agency behavior.

In essence, then, this is the theory of what has been called the "rigidity cycle" in organizations. The inability of the agency to gain political support from its environment causes it to turn to those interest groups which are most directly affected by the agency's function. The organization and the clientele interpenetrate one another to the extent that they are virtually indistinguishable in their goals. The agency loses the will the incentive to act in a fashion which would be inimical to the interest of the clientele. The agency becomes passive, conservative, and demonstrates a "benign neglect" of larger public values. This whole process takes place
over an extended period of time and is indicated by certain internal and external characteristics of the agency involved. Regulatory agencies, especially the independent regulatory commissions, are alleged to be the most susceptible to falling into the pattern of the "rigidity cycle."

Stated in this bald fashion, the idea of the agency "rigidity cycle" is fairly straightforward. Some complexities do arise in two areas. The first concerns the exclusivity of agency/clientele relationships, while the second involves the apparent multi-dimensional nature of agency "maturity" or age. These complexities should not be allowed to obscure the crucial proposition that the gaining and keeping of political support is directly related to the progression of the agency life cycle. It is this relationship which must be examined, as it is the heart of the "rigidity cycle" model. Ripley and Franklin, in their recent book which deals partially with the phenomenon of agency again, emphasize the importance of undertaking further studies along the lines suggested here:

An additional possibility, developed only occasionally in the literature on organizations or bureaucracy, is that the dimensions of maturity are related to the degree of political support for an agency and its programs. Bernstein suggests that there is a natural progression in the level and source of support or hostility for independent regulatory commissions and that this support or hostility is the central factor in determining the general policy stance of a commission. Such a notion is intriguing and deserves rigorous testing not only on independent regulatory commissions but on a wide variety of agencies. It may be that there is a natural curve of maturity and a natural curve of support that work together to produce at least gross programmatic predispositions on the part of the agencies and the degree of latitude afforded those predispositions on the part of agencies by influential actors.
The comment by Ripley and Franklin effectively restates the theme and motivation of this paper. The discussion in this chapter has emphasized the work of Bernstein and Downs and their basic agreement on the general hypothesis that political support, or lack of it, is important in generating the kind of response an agency can or will make to its clientele. The general relationship which will be tested is presented in Figure 2-1. In conjunction with Bernstein's conceptualization, this relationship is depicted as a straight line. If specific political support from a single clientele or clientele sector is considered, then the hypothesized relationship with the agency life cycle would be as shown in Figure 2-2. Here, initially low support is given in the agency's youth by its clientele but this increases as the two opponents reach a mutual accommodation and the regulated interests seek to protect "their" agency.

The next chapter will state some specific hypotheses. The agencies to be examined will also be described briefly.
FIGURE 2-1
HYPOTHESIZED RELATIONSHIP BETWEEN DIFFUSE SUPPORT
AND REGULATORY AGENCY LIFE PHASE

High

Level of Diffuse Political Support

Low

Youth Maturity

Regulatory Agency Life Phase

FIGURE 2-2
HYPOTHESIZED RELATIONSHIP BETWEEN SPECIFIC SUPPORT
AND REGULATORY AGENCY LIFE PHASE

High

Level of Specific Political Support

Low

Youth Maturity

Regulatory Agency Life Phase
FOOTNOTES

1 Obviously, this characterization has some serious deficiencies. However, this is generally the level of sophistication at which most discussions of agency capture are pitched. This paper will try to refine this essentially crude characterization to some degree. See fn. 5, below. The idea of goal distortions as the chief element of capture is taken from Rourke. See Francis E. Rourke, Bureaucracy, Politics, and Public Policy (Boston: Little Brown and Company, 1969), pp. 22, 23.

2 This "wisdom" has not been confined solely to the academic world. See, for example, the remarks concerning the regulatory life cycle in the letter from Mr. Z. D. Bonner of Gulf Oil Corporation to Senator Ervin in Regulatory Reform—1974, Hearings before the Senate Committee on Government Operations, p. 59.


5 The concept of regulatory agency "capture" has not, however, gone completely unchallenged. McCraw notes that in the few detailed studies of regulatory history which have been made, no clear pattern emerges which supports the capture thesis in this classic form. Indeed, in some cases it has appeared as if the industry sector was captured by the regulatory agency, rather than the reverse. McCraw's conclusion is that the concept of regulatory agency capture is inadequate to describe a much more complex reality. Ibid., pp. 165-171. McCraw's comments on the inadequacy of the concept of "capture" are well taken. It may well be that the use of the term to describe the relationship of the regulatory commissions and interest groups in misleading because the term implies a normative judgement rather than an empirical statement. Once the term "capture" is brought into a discussion, the possibility exists that an explicit or implicit assumption will be made that the regulating agencies "belong" to these groups, since the agencies depend upon their clienteles for political support. But, this relationship can also be thought of as symmetrical. Regulatory agencies are vested with public authority, and the regulated industries are obliged to abide by agency decisions once all channels of relief are exhausted. Thus the agency/clientele relation is two-way. The answer to the question of whether agencies do what their clienteles want them to do, or do the clienteles do what the agencies want them to do is that are probably strong elements of both. Bernstein indicates that after an initial formative period agency and clientele views become similar about what should be done and persuasion is mutual. The advantages of this arrangement would flow both ways and neither agency nor clientele would always get what each desired. If this is true, "capture" may be not so much capture as a pattern of mutual accommodation and reciprocity. This is considerably different from the normal meaning of capture which describes a situation in which all dependencies are one-way.
This alternative conceptualization of "capture" will be addressed by efforts in this paper to test some hypotheses derived from the life cycle model. Such testing should reveal whether the concept of "capture" as is ordinarily used in discussions of regulatory policy is an appropriate description of reality, or one which is seriously misleading. To avoid confusion, however, the term "capture" will continue to be used in the body of this paper with its widely accepted meaning—domination of the regulatory agency by its clientele—unless otherwise noted.

6 This uses the concept of theory somewhat loosely, but it reflects the observation of James Q. Wilson that "[w]hatever progress may come in the future, anyone attempting today to give a systematic account of organizational behavior, especially of politically relevant behavior, cannot pretend he is offering a theory in any strict sense. At best, he can offer a theoretical perspective, a way of looking at organizations that directs attention persuasively to a few central processes that seem to explain (though not predict, in any scientific sense) a wide variety of phenomena." James Q. Wilson, Political Organizations (New York: Basic Books, Inc., 1973), p. 13.

7 Bernstein, Regulating Business by Independent Commission, p. 74.

8 Ibid., p. 76.

9 Ibid., p. 77.

10 Ibid., p. 80.

11 Ibid., p. 82.


13 Bernstein, Regulating Business by Independent Commission, p. 83.

14 Apropos of this point, Noll states that ideally, "regulatory commissions are composed of neutral, objective experts on the affairs of the regulated industry and on the public interest in the behavior of the regulated. In practice, appointees to commissions must have the tacit approval of the regulated industries. Appointments, almost unnoticed by the public, are closely watched by regulated firms." Noll, Reforming Regulation, p. 43.
15. The trauma of Watergate may have had an effect on the interest of Congress in regulatory matters, at least in the area of commission appointments. A recent news article has discussed this trend:

"[G]rowing numbers of nominees to federal regulatory commissions --as well as some commission members--have been rejected by the Senate or forced out of office because of conflicts of interest, extensive involvement in partisan politics, close ties with interest groups . . . or a record of hostility toward consumer interests.


Senator Magnuson, the chairman of the committee, is quoted as saying that: "Our tolerance for medicity and lack of independence from economic interests is rapidly coming to an end." Ibid. In 1974, the Senate refused to confirm Robert H. Marris for a seat on the Federal Power Commission. Also in 1974, the Commerce Committee refused to act on the nominations of Daniel T. Kingsley to the Federal Power Commission and Luther Holcomb to the Federal Communications Commission. In 1975, the Senate refused to reappoint Helen D. Bentley and Isabel Burgess to their commission seats on the basis of improper activities. Ibid.

Whether this represents a real reorientation of Congress to the regulatory commissions or is just a ripple effect from Watergate is problematic, but these Senate actions do point up the fact that Congress can intervene to correct flagrant abuses in regulatory affairs where it chooses to do so.

16. Bernstein, Regulating Business by Independent Commission, p. 84.

17. Ibid., p. 87.

18. Ibid., p. 87.

19. By professionalism Bernstein here means technical specialities, e.g., law and medicine, rather than the process of professionalization.

20. Ibid., p. 90.

21. Ibid., p. 92.

22. Ibid.

23. Ibid., p. 94.
25 Bernstein leaves the impression that once an agency reaches senility, there it remains. This has become more or less the accepted view. However, Mazmanian and Lee point out that this conservative view has tended to overshadow the alternative, "that even mature organizations can be vehicles for change, instruments for implementation of new and experimental policies, dynamic in their operations, and willing to innovate and change within." They point to the U.S. Army Corps of Engineers as a bureau which has broken out of its previous pattern of stagnation in response to a changing environment. As they express it: "The Corps is indeed undergoing many changes in response to new external demands. Its standard operating procedures are changing; its norms and values are changing; its outputs are changing. In our view this goes well beyond minimal adaption. It represents an innovative and progressive response pattern to new demands." Daniel A. Mazmanian and Mordecai Lee, "Tradition be Damned! The Army Corps of Engineers is Changing," Public Administration Review, XXXV (March/April, 1975), 166-172. A somewhat different view is expressed by Leonard Shabman. He argues that although the Corps has changed in recent years, it has not been in direct response to external demands, but rather as an indirect response to the erosion of political support for its traditional programs. Leonard A. Shabman, "Why the Army Corps is Changing," Public Administration Review XXXV (September/October, 1975), 564-565. This latter view more closely corresponds to Bernstein's model in that it emphasizes the crucial variable of political support.

26 While not having any direct evidence that such is the case, the possibility exists that Bernstein's model of the independent commission life cycle was the source of Downs' more general schema. Even if this was the case, the broader scope of the Downsian model gives it intrinsic interest.

27 Downs, Inside Bureaucracy, p. 7.

28 Ibid., p. 10.


30 Ibid., p. 264.

31 Ibid., p. 20.

32 Note the similarity to the "passivity" Bernstein mentions as characteristic of old age.

33 Ibid., p. 22.

34 Ibid., p. 23.

  Policy-Making in the Federal Executive Branch, ed. by Randall B. 

  The Sociology of Organizations, ed. by Oscar Grusky and George A. 

38. Donald P. Warwick, A Theory of Public Bureaucracy: 
  Politics, Personality, and Organization in the State Department 

39. William A. Niskanen, Jr., Bureaucracy and Representative 


41. Herbert Kaufman, "The Natural History of Human Organizations," 
  Administration and Society, VII (August, 1975), p. 133.

42. Norton E. Long, The Polity (Chicago: Rand McNally and 

43. Rourke, Bureaucracy, Politics, and Public Policy, pp. 23,24. 
  See also Herbert A. Simon, Donald W. Smithburg, and Victor A. Thompson, 
  "The Struggle for Organizational Survival," in Bureaucratic Power in 
  National Politics, ed. by Francis E. Rourke (Boston: Little, Brown 

44. The term "rigidity cycle" is taken from Downs, where its 
  meaning is similar to that given here. See Downs, Inside Bureaucracy, 
  pp. 158-160.

45. This is discussed in the next chapters.

46. Also discussed in the next chapter.

47. Ripley and Franklin, Policy-Making in the Federal Executive 
  Branch, pp. 184, 185.
CHAPTER III

THE RESEARCH MODEL AND SOME HYPOTHESES

The Research Model

A positive demonstration of the existence or non-existence of a regulatory "life cycle" culminating in the capture of the regulatory function by the regulated interest will clarify some of the tangled complexities of regulatory politics. So far in this paper the arguments of Bernstein and Downs concerning governmental agency life cycles have been presented. Support was found in the literature for the assertion that the external environment of public agencies, especially the quantity and quality of political support proceeding from that environment, was important in explaining regulatory agency behavior. Because the life cycle concept posits that agency capture and agency rigidity take place as functions of the age of the agency, agency maturity or age must also be considered as an important explanatory factor. These relationships can be presented schematically as a model, as shown in Figure 3-1.

In line with the discussion in the previous chapter, this model assumes that agency age and agency rigidity are related. This relationship, however, is mediated by the intervening variables of agency political support and agency capture, hence in Figure 3-1, the relationship between age and rigidity is shown by a broken line rather than by the solid lines which indicate the causal pathways specified by Bernstein and Downs in their discussion of the agency life cycle.
Age, according to Bernstein and Downs, affects the quality and quantity of the political support available to an agency, as shown by the solid line from age to political support. Agency capture is directly affected by the agency's political support, as represented by the solid line from political support to capture. Agency capture is cited as a major causal factor in creating agency rigidity, consequently the model indicates this relationship by a solid line between capture and rigidity. This portion of the model indicates that the age of the agency, the political support of an agency, and the "captiveness" of an agency have both individual and cumulative effects on agency rigidity—the inability of an agency to respond flexibly or quickly to other than one segment of external environmental demands.

There are some other possible relationships in this model. These are not specified in the theory of the agency rigidity cycle as elaborated by Bernstein and Downs, but they are implicit in the structure of the model and are worthy of some consideration. The
first relationship is that the age of the agency may be a direct causal factor in causing the agency to become captured, without the necessity of an intervening process of loss of political support. This possibility is shown by the broken line between age and capture. The other possibility is that the loss of political support may lead directly to agency rigidity without the need of any process of agency capture. The broken line between support and rigidity represents this possibility. This last relationship is especially interesting in view of Downs' apparent unconcern with the problem of agency capture. Since he seems to assume that agencies exist to serve specific clienteles, the notion of capture becomes almost meaningless in his frame of reference. The term "capture" suggests that the agencies have been diverted from some other task, but Downs would argue that this is not so, that agencies are to some extent "born" captured, as each agency must "demonstrate that its services are worthwhile to some group with influence over sufficient resources to keep it alive," and that the generation "of such external support is particularly crucial for a new bureau."¹ Downs argues that rigidity does take place in public agencies, but he does not recognize a separate process of capture taking place as a necessary antecedent to the rigidification of an agency.

Irrespective of its source, the results of agency rigidity appear in the policy production of an agency, first in the authoritative outputs, e.g., the rules and decisions, of the agency, and, second, in the consequences of these decisions for society. These consequences can be considered as policy outcomes.² This paper will not be concerned with demonstrating the types of policy outputs of the agencies and the social consequences of such outputs. The assumption that the
regulatory agencies create economic distortions, as discussed in the first chapter, will be taken as axiomatic. Our attention will be focused on the causal sequences within the regulatory agencies which result in an internal state of the agency which we call agency rigidity. We assume that such a state is productive of adverse social consequences. To empirically trace such connections is beyond the scope of any single paper. This is, however, an area rich in potential for future research and one that should not be long left ignored.

Having discussed the life cycle model in its schematic form, some specific hypotheses concerning the relationships depicted by the model can be stated. The following section is devoted to the statement of these hypotheses. A number of ancillary hypotheses, which are not directly derived from the model as presented, but which have been suggested by Bernstein or Downs or both as being of some importance in assessing regulatory agency behavior, are also included. Not all of the hypotheses formulated and listed could be tested with the time and data available for this paper. The primary interest of this paper is in testing the main relationships of the life cycle model. Future research may find in the hypotheses presented here fertile ground for a complete empirical evaluation of the life cycle model as it corresponds to actual regulatory agency behavior. The hypotheses presented can serve as a preliminary guide for such research. In the present context, however, only a few of the many available research possibility centering on these hypotheses could be effectively managed. Consequently, many of the hypotheses included are presented for informational purposes only. The actual analysis undertaken in this paper will focus on a smaller number of the more
important hypotheses.

**Main Hypotheses**

Based on the rigidity cycle model as presented above, the first hypothesis deals with the most general form of the relationship under examination.

H1. **The greater the age of the regulatory agency, the greater the rigidity of the agency.**

Organizational age, or maturity, is a multi-dimensional concept. As Ripley and Franklin have shown in their research, no single, solid, measurable concept of agency maturity exists. "The empirical exploration of the indicators used to date . . . indicate that agency maturity is an elusive, if not illusive concept."³ Ripley and Franklin make the following arguments concerning organizational maturity; agency maturity is not a simple phenomenon; there are at least four separate dimensions to the maturation process in an agency; and, finally, each of the separate dimensions should be explored further with respect to policy actions and policy results.⁴ Overall, they show that three of their dimensions of agency age—chronological age, structural maturity, and organizational maturity—are positively associated with decreasing policy actions. A decrease in policy actions can be interpreted as being equivalent to increasing agency rigidity.⁵

While the comments of Ripley and Franklin are supportive of the ideas developed here, they did not approach one of the major concerns of this paper. This concern is the effect of agency age on the levels of political support obtained by the agency and the consequent effects on agency "captiveness" and agency rigidity. This
question will be addressed directly in the present research.

H2. The greater the age of a regulatory agency, the more likely is the agency to become captured.

While the analyses of Bernstein and Downs indicated that political support was a crucial intervening variable between a regulatory agency's age and its degree of capture, Bernstein is vague enough on this matter to encourage a separate analysis of the effects of age on capture without the mediating effects of political support.

H3. The capture of a regulatory agency is positively related to the rigidity of the agency.

In Bernstein's model of the regulatory commission life cycle, the inflexibility described here as agency rigidity is scarcely distinguishable from agency capture. In this paper an attempt is made to establish and maintain a distinction between these two concepts, and to treat them as two separate aspects of organizational behavior. There is ample reason to suspect that the two are highly related and that due to the rather ill-defined nature of the two states each may take on some of the aspects of the other. In this paper, however, two different sets of non-overlapping variables are chosen to represent these two concepts. As a consequence, regardless of their closeness in terms of actual agency behavior, rigidity and capture are analytically defined as separate in the present research context.

H4. The greater the diffuse political support afforded a regulatory agency, the less the rigidity of the agency.

H5. The greater the specific (clientele) support of a regulatory agency, the greater the rigidity of the agency.
Both Bernstein and Downs imply that the quality of an agency's political support—its relations with "relevant others" in its external environment—generates or mitigates agency rigidity over time. But, political support has a different effect depending upon whether it is general or specific in nature, as the two hypotheses indicate. By diffuse political support is meant the support of the agency and its programs by the public, the President, and Congress. Public support is that support afforded the agency by non-governmental actors other than members of the regulated sector. Because of the lack of data for measurable indicators of public support for specific regulatory activities, this variable will not be tested in this paper. Its potential importance, however, should not be overlooked. The major diffuse support variables chosen for this paper revolve around measures considered indicative of Presidential and Congressional support of the regulatory agency. The specific support variable ideally would be measured by the parochial support provided an agency by the interest sector whose activities are regulated, or who are directly affected by regulatory activities. The actual data on specific support was found to be less clear-cut than was originally hoped. Consequently, this paper will deal primarily with the demonstrable effects of diffuse, rather than specific support.

Ancillary Hypotheses

The following hypotheses were not derived from a consideration of the primary causal pathways explored in the basic rigidity model. These factors are believed, however, to have some bearing on the development of agency rigidity, hence they are included for informational purposes.
H6. The stronger and more competitive the clientele groups surrounding a regulatory agency, the less the rigidity of the agency.

Salamon and Wamsley observe that agencies vary in their patterns of responsiveness since they face different clusters of "relevant others."\(^6\) Some, like the Department of State and the Office of Economic Opportunity cannot find powerful supporters and are therefore vulnerable. Others are captured by a single powerful client, while some are fairly independent by virtue of the support of numerous powerful clients in competition with one another. This hypothesis is in effect a restatement of Hypothesis 5, but it emphasizes the possibility that specific support in itself can be a complex phenomenon, with effects that can cut in opposite directions.

H7. The greater the size of a regulatory agency, the less the rigidity of the agency.

The usual assumption concerning agency size is that great size is an important factor in creating agency rigidity. This intuitive assumption may be incorrect for two reasons. The first is, as Blau and Meyer argue, that the economies of scale of the large organization may cause a large organization to be relatively less rigid than a smaller organization.\(^7\) The second is that a larger, more diversified agency may be better able to garner political support from the President and Congress than is a smaller agency with more narrow program concerns.

H8. The less the degree of cohesion among independent regulatory commission executives, the greater the rigidity of the agency.

Organizations suffer stress from the effects of centrifugal forces in their external environment which pull them in different
directions at the same time. Some of this conflict can be ameliorated by a unified leadership which provides a strong institutional focus for the agency. Some organizational literature also suggests that internal conflicts and cleavages tend to "freeze" the organization into a rigid behavior pattern. 8 If such conflicts are absent, or at least moderate, at the level of top leadership, then the agency should be less subject to rigidifying. However, this can cut two ways. If the leadership is highly unified and exhibits low levels of conflict, then the agency may be relatively inflexible due to the lack of new approaches and ideas which tend to be generated by conflict. Where the views of the regulated interest are heavily represented on the commission, cohesion may be especially stultifying. Both possibilities must be considered and assessed.

H9. The greater the average age of independent regulatory commission executives, the greater the rigidity of the agency.

This hypothesis relies on the Downsian assertion that an older agency will have a greater number of "conservers," who have a tendency toward inflexible behavior. While it is not assumed that imagination and flexibility are confined strictly to the young, it does seem likely that older executives who no longer have serious expectations of moving upwards will tend more to a "conserver" attitude, and will therefore be more concerned with maintaining a secure and congenial environment within the familiar and predictable parameters of agency activity.

H10. Regulatory agencies headed by a commission rather than by a single executive will tend toward greater rigidity.

This hypothesis assumes that a regulatory agency with a single head will be located outside the independent commission structure.
Therefore, this executive will either be in an executive agency or will be in a departmental subunit. In either of these two cases he will have a direct line of responsibility and accountability to the President or his departmental chief. He is subject to a closer discipline, even if such a discipline remains largely latent. The independent commission executive, on the other hand, cannot be easily removed during his tenure, even by the President. This independence, combined with other such factors as disinterest in the agency by other governmental actors or the general public, the tendency for "sound men" to be appointed to the commissions, and a general shortage of resources flowing to the commission, will tend to move the commissioner toward the views of the regulated and/or toward an unimaginative and uninspired agency stewardship.

H11. The greater the personnel turnover in a regulatory agency, the greater the rigidity of the agency.

This is still another relationship which is suggested by Downs. Downs argues that agency will slow down as large numbers of "climbers" began to leave after the period of the agency's gestation. This represents a substantial loss in expertise and enthusiasm, and a growing inflexibility as "conservers" come to dominate the agency. In this case causation may be reciprocal, as well. That is, "climbers" may leave because the agency is slowing down, in which case their departure merely speeds up rather than causes rigidity. In either case, Downs' model predicts a high degree of association between these two conditions.

H12. The greater the research activities of a regulatory agency, the less the rigidity of the agency.
Davies and Davies argue that the research efforts of regulatory agencies are important in avoiding an overdependence on the regulated interests. "[R]esearch efforts are important because one of the primary ways in which the regulators have been captured by the regulated is through the monopoly of information and expertise of the regulated." A research capability should contribute to the maintenance of the freedom of regulatory action by providing alternative sources of information for the agency and lessening its dependence on the regulated.

H13. The lesser the quality of leadership in a regulatory agency, the greater the rigidity of the agency.

While leadership has never been precisely defined and measured in an entirely satisfactory manner, its apparent importance merits its continued use as an explanatory factory, albeit one which is essentially residual in nature. Rourke has commented on the role of executive leadership in public organizations:

Apart from attending to the purely housekeeping chores of management, an executive has such major internal responsibilities as arousing the enthusiasm and energy of the organization's employees for its objectives, settling disputes and conflicts of interest within the organization, and generally serving as a catalytic agent for the continuous appraisal of existing programs, and the inauguration, whenever necessary, of innovations in policy.

Strong leadership may be able to overcome the constraining effects of a single-client relationship and develop other lines of support for an agency which reduce its dependence on the regulated interest. Poor leadership, on the other hand, would be unlikely to overcome the effects of client dominance and would perhaps even encourage it.

The model and hypotheses presented above would form the major
parameters of a complete empirical analysis of the theory of the regulatory agency life cycle. Systematic analysis of the described relationships would lead to a more accurate understanding of that formidable process which is so often and so simplistically portrayed as the "capture" of regulatory agencies. Unfortunately, not all of these relationships can be assessed in this one paper. However, a sufficient number are investigated to permit some tenative conclusions about the potential of the life or rigidity cycle model as a guide for understanding and predicting regulatory behavior. If the model appears to have predictive utility, then the way is clear for the encouragement for future research, expanding on the base laid down in this paper. The following section introduces the variables used in this research and the relevant indicators for those variables.

The Variables

The major obstacle confronting the researcher interested in bureaucracy and public policy is the quality and availability of data. Such data problems are especially intractable when dealing with the "informal" side of bureaucratic behavior, where so much of the free play between organization and clientele takes place. For example, the possibility exists that regulatory agency capture consists in nothing more than a series of impenetrable and shifting "gentlemen's agreements." However, with respect to the hypotheses enumerated, some objective data sources for measures of the related variables can be found for the agencies in question. The model cited indicates that certain characteristic phenomena will be observed as part of the regulatory agency "rigidity cycle." The task here has
been to find indicators which can portray these characteristics quantitatively. The variables and indicators are simply listed below. The individual indicators will be discussed in more detail as they are introduced into the analysis in the following two chapters.

Rigidity

The concept of rigidity is centered around the policy-making performance of the agency. Rigidity implies that the agency reduces the quality and quantity of its policy output, and that its response time is slow. Our indicators do not tap the policy outputs of the agencies, but instead center on agency performance with respect to internal workload and personnel characteristics. The following measures are used.

1. The percentage of backlogged cases
2. The efficiency of the agency in disposing of workloads
3. The rate of turnover among agency executives
4. The average age of agency executives
5. The number of agency executives who have had legal training and/or backgrounds
6. Number of agency executives recruited from previous positions in the agency
7. Number of agency executives who have gained expertise in regulatory policy or management prior to reaching top agency positions

Capture

Indicators of agency capture are descriptive of friendly, accommodating, and/or deferential behavior by the regulatory agencies toward the
private interest sector which is being regulated. The emphasis in this paper is on the question of ties between agency executives and the regulated sectors. Two measures are used.

1. Number of agency executives who are recruited from the regulated sectors

2. Number of agency executives who pursue post-regulatory service careers in the regulated sectors

**Political Support**

"Agencies," Rourke notes, "have power when they command the allegiance of fervent and substantial constituencies."¹⁴ This is the essence of political support—the encouragement and, more importantly, the resources an agency receives from various actors in its external environment. The three major sources of regulatory agency support are that of the President, Congress, and the agency's clientele (the regulated interest). The measures are as follows.

1. Rate of growth of Congressional budgetary appropriations for the agencies

2. Rate of growth of Presidential budget requests for the agencies

3. Success rate of the agencies in achieving larger appropriations than were requested for them by the President

4. Rate of growth of the number of personnel in the agencies

5. Rate of growth in the number of "supergrades" (GS-14) and above) in the agencies¹⁵
6. Rate of growth of supergrades in relation to growth of other agency personnel
7. Number of groups whose testimony before the House Appropriations subcommittees supports the agencies
8. Ratio of supportive over negative testimony before the Appropriations subcommittees

**Age**

The indicator used to measure agency age is the chronological age of the agency, measured in yearly intervals from the date of the agency's inception.

**The Nature of the Data**

The data reported in this paper are derived from four main sources: the annual reports of the respective agencies, the *Budget of the United States Government* for the years concerned, annual issues of the *Government Organization Manual*, and prints of the annual budgetary hearings before the relevant subcommittees of the House Appropriations Committee. From these documents figures were derived pertaining to agency workload, the budget and personnel growth characteristics of the agencies, the names and organizational positions of agency elites, and the type and amount of political support generated by the agencies. While the construction of specific variables will be discussed as they are introduced into the analysis, some general points should be mentioned here. In some cases, complete data for all the years of an agency's existence could not be obtained, either because the documents were not issued or were not
available. A major problem arising in the use of workload data was a tendency for agencies to change the format and content of their annual activity reports. For example, the Federal Trade Commission reported its casework activity in approximately the same format from 1915 to 1950, at which time the agency changed almost completely both what it reported, and the format in which it was reported. This was done in conjunction with a reorganization of the agency, which appears to be the primary reason for reporting and format changes in all of the agencies surveyed. To a lesser extent, this problem also existed in relation to the budgetary data which over some 50 years is subject to considerable modification. Given these conditions the problem for research was to attempt to find indicators that were reported by an agency, if not for the whole span of its existence, then at least for a long enough period to have some hope of detecting trends. As a result of exclusions based on this criterion, not all available data could be employed in analysis. However, for each agency surveyed enough data was obtained to produce multiple indicators for almost all of the variables in the study.

The tendency for agencies to change the manner in which they reported their activities, as well as occasional changes in the nature of agency activities, lead to another problem. This is the question of data comparability. This problem is especially acute which respect to agency workload data, where a complicating factor is that agency activities cannot always be simply and directly compared across agencies. For instance, the issuance of a cease
and desist order by the FTC cannot be meaningfully compared to the processing of a broadcasting application in the Federal Communications Commission. Some kinds of activity are routine, while others are complex and technical; and it is rarely clear to the outsider which is which. Cross-agency comparisons of these data, therefore, must be considered with some caution. Other indicators, however, such as those dealing with agency elites, agency budgets, and agency political support (as it is conceptualized here) are inherently comparable, and will be used accordingly.

The Agencies

The final section of this chapter briefly describes the regulatory agencies selected for analysis. There were several criteria for selection. The first criterion was representativeness, in that agencies were selected which seemed intuitively to exemplify the kinds of qualities under investigation, e.g., rigidity, as well as escape from such a pattern. The same was also divided between independent commissions with multiple heads, and departmental agencies with single heads. Another criterion was some disparity in the ages of the agencies. The desire was to choose agencies which had been in existence long enough for the development of "maturity" or "old age" (something of a guess, since Bernstein and Downs do not set a specific minimum time for the occurrence of these states). Agencies whose origins were so far in the past as to preclude opportunities for collecting data were excluded. Some agencies were selected which have been subjected to intense criticism at one time or another, e.g., the National Labor Relations Board in the 1950's, as well as some which appear to have revitalized themselves and broken away
from industry dominance, e.g., the Federal Trade Commission. Different types of regulatory functions were also included, as with the Federal Aviation Administration, which does not directly regulate the economics of the aircraft industry, but does so indirectly through its programs of safety regulation, which can have substantial economic impact on the industry. In short, the agencies selected have a range of elements which can be assumed to be representative of the various stages of manifestations of the rigidity cycle.

The agencies selected are listed below:

Independent Regulatory Commissions

Civil Aeronautics Board (CAB)

Federal Communications Commission (FCC)

Federal Trade Commission (FTC)

National Labor Relations Board (NLRB)

Departmental Agencies

Federal Aviation Administration (FAA)

Occupational Safety and Health Administration (OSHA)

Packers and Stockyards Administration (PSA)

Executive Agency (Non-departmental)

National Transportation Safety Board (NTSB)

On the following pages each of these agencies is described briefly as to origin, function, activities, size, and so forth. These descriptions are obtained principally from the agencies' own descriptions of themselves in the Government Organizational Manual. Supplemental material is from the Budget of the United States Government.
The Civil Aeronautics Board

The CAB was established by the Civil Aeronautics Act of 1938, and continued by the Federal Aviation Act of 1958. The CAB's official mission is to promote and regulate the civil air transport industry within the United States, and between the United States and foreign countries. The CAB grants authorizations to air carriers to engage in interstate and foreign commerce, reviews proposed rates and fares, and grants subsidies to air carriers to finance the costs of air service to communities with insufficient traffic to cover service costs. The CAB also rules on proposed mergers, acquisitions of control, and agreements among carriers, as well as concerning itself with unfair and deceptive competition in air transportation services. The CAB had 720 employees in 1975 and a budget of $85,04,000 for that year.

The Federal Communications Commission

The FCC was created by the Communications Act of 1934 (preceded by the Radio Act of 1927) and received additional jurisdiction under the provisions of the Communications Satellite Act of 1962. The FCC regulates interstate and foreign communications by wire and radio. This includes the regulation of radio and television broadcasting; telephone, telegraph, and cable television operation; two-way radio; and satellite communications. The FCC issues licenses, renewals, and assignments in broadcast services, and regulates radio use for purposes other than broadcast or common carrier communications. Such purposes include aviation and marine radio and citizen's radio. In 1975, the Commission had a budget of $46,875,000 and employed 1,968
personnel.

The Federal Trade Commission

The FTC was established by the Federal Trade Commission Act of 1914 and by the Clayton Act of that same year. The authority and responsibilities of the FTC have been expanded by a number of amendments to these acts, and by duties delegated to the FTC. The FTC attempts to promote competition through the prevention of such trade restraints as price-fixing; regulates false or deceptive advertisement; supervises trademarks and labeling practices; and regulates credit practices. The FTC also gathers and publishes data concerning economic and business conditions in the United States. The FTC seeks to enforce its rules through voluntary compliance and through formal litigation in the courts. The FTC is also responsible for the regulation of textile and fur labeling. The FTC had an annual budget of $38,954,000 in 1975, and employed 1,569 persons in that year. The FTC is the oldest agency examined in this study.

The National Labor Relations Board

The NLRB was created by the National Labor Relations Act of 1935 (the Wagner Act). This act was amended by the Taft-Hartly Act of 1947 and the Landrum-Griffin Act of 1959. The NLRB has two major functions. The first is preventing unfair labor practices by employers and labor organizations. The second function is conducting secret ballot elections among employees to determine whether they desire to be represented by a labor organization. The General Counsel, part of the agency, has the authority to investigate charges,
issue complaints and prosecute those complaints before the Board. The NLRB can, however, act only when it is requested to do so by the filing of charges of unfair labor practices or petitions for employee representation elections. The NLRB employed 2,349 persons in 1975, the second greatest number among the agencies surveyed in this study. The 1975 budget was $62,458,000.

The Federal Aviation Administration

The FAA was established by the Federal Aviation Act of 1958. Between 1958 and 1967, the FAA was an independent agency. In 1967, the agency became part of the Department of Transportation as a result of the Department of Transportation Act of 1967. The FAA regulates air commerce to promote air safety, civil aviation, and the national airport system. The FAA regulates the use of navigable airspace, and operates a system of air traffic control and air navigation for both civilian and military aircraft. With regard to safety regulation, the agency issues and enforces rules, regulations, and standards concerning the manufacture, operation, and maintenance of aircraft. The agency also certifies airmen and aircraft. With 54,905 employees and a budget of $1,453,131,000 in 1975, the FAA is by far the largest, in both budget and personnel, of the agencies discussed in this paper.

The Occupational Safety and Health Administration

OSHA was established by the Occupational Safety and Health Act of 1970. The agency is responsible for developing occupational safety and health standards, the issuance of regulations, and for inspection and investigation of compliance with standards and regulations. The agency can issue citations and propose penalties for noncompliance
with those standards and regulations OSHA is the newest of the agencies surveyed, and has the second largest 1975 budget, $102,006,000. The agency employed 1,987 persons in that year.

The Packers and Stockyard Administration

The PSA was established by a memorandum of the Secretary of Agriculture in May, 1967. The agency administers the Packers and Stockyards Act of 1921. The objective of that act is to help maintain competition in livestock, meat, and poultry marketing and to establish fair business practice rules in these industries. The agency supervises the marketing operations of public stockyards, private stockyards, meatpackers, livestock commission firms and dealers, and poultry dealers and processors. The agency bonds market agencies and dealers, checks scales, and reviews proposed rates and tariffs. The PSA had a 1975 budget of $4,899,000 and employed 192 persons, making it the smallest of the agencies surveyed.

The National Transportation Safety Board

The NTSB was established by the Independent Safety Board Act of 1975 and became active as an independent agency in April, 1975. Prior to that time, the agency existed as part of the Department of Transportation, where it had resided since 1967. The NTSB is charged with promoting transportation safety by conducting accident investigations and by recommending safety improvements. As part of this mission, the NTSB establishes regulatory requirements for reporting accidents. The agency evaluates and recommends procedures for the transportation of hazardous materials. The Board also reviews on appeal the suspension, modification, revocation, or denial of any
certificate or license issued by the Secretary or an administrator of the Department of Transportation. In carrying out its functions, the Board had a 1975 employment of 270 persons and a budget of $9,627,000.
FOOTNOTES

1 Sabatier contends that some regulatory agencies are created for the purpose of "managing" and coordinating the regulated industries rather than policing them. "The Interstate Commerce Commission, for example, was authorized... to coordinate transportation policy rather than to promote competition..." The Federal Trade Commission was pushed primarily by business worried over 'excessive' or chaotic competition, and such a managerial orientation is probably consistent with the political genesis and Congressional mandate of the Civil Aeronautics Board, the Federal Communications Commission, and the Atomic Energy Commission as well. Thus many of the agencies were intended—both by their original proponents and their legislative sovereigns—to be 'captured.'" Paul Sabatier, "Social Movements and Regulatory Agencies: Toward a More Adequate—and Less Pessimistic—Theory of 'Clientele Capture,'" Policy Sciences, VI (1975), pp. 302, 303.

2 The distinction between policy outputs and policy outcomes was noted by David Easton in the development of his systems model of politics. See David Easton, A Systems Analysis of Political Life (New York: John Wiley and Sons, Inc., 1965). The chief operational usage made of this distinction has been in the so-called "policy output" literature, which is concerned with socio-economic determinants of governmental policy. A good example, emphasizing the output/outcome distinction is Ira Sharkansky, "Governmental Expenditures and Public Services in the American States," American Political Science Review, LXI (December, 1967), 1066-1077. See also Richard I. Hofferbert, The Study of Public Policy (Indianapolis: The Bobbs-Merrill Company, Inc., 1974).


4 Ibid., p. 177.

5 That is, a slower rate and lower magnitude of change. In effect, the agency "slows down."

6 "Relevant others" are defined by Salamon and Wamsley from the perspective of agency needs for survival: "The primary organizational need becomes survival, which requires vigorous pursuit of two precious commodities; legitimacy and resources. Those who command these commodities and so can insure agency survival or threaten it, thus have a first call on agency responsiveness; and the agency's behavior boils down to a concerted effort to define and carry out its task in a way that will stabilize and institutionalize supportive relationships with "relevant others." Salamon and Wamsley, "The Federal Bureaucracy," p. 155. These scholars add that the agency's position with respect to its clientele will also depend on some factors making up the agency's "internal political economy," e.g., agency norms, and the recruitment, socialization, promotion, and succession patterns of the agency. Ibid., pp. 159, 160. The present study examines some aspects of the agency's
internal political economy as reflected in agency elite characteristics. See Chapter 4.


9 The Supreme Court ruled in 1935 that a President cannot remove a duly-appointed independent regulatory commissioner except for cause. Humphrey's Executor v. United States, 295 (U.S.), 602 (1935).

10 Related to the hypothesis here stated is the question of what Seidman calls the "politics of institutional type," which is concerned with the power and prerequisites of the various types of governmental administrative bodies. See Harold Seidman, *Politics, Position, and Power: The Dynamics of Federal Organization* (New York and London: Oxford University Press, 1970), pp. 195-268. Due to these differing powers and prerequisites, access to the different agencies by interest groups may vary, a variation which may affect the policies generated by the agency. Rourke has noted a belief "that a change in the location of an executive agency within the administrative branch will seriously affect the ability of outside groups to influence the substance of policy as administered by the agency." Quoted in L. Harmon Zeigler and G. Wayne Peak, *Interest Groups in American Society*, 2d ed. (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972), p. 169.


15 The term "supergrade" is usually reserved for positions equivalent to GS-16 or higher. The term as used here includes all levels above GS-14. This reflects to some extent the fact that prior to the late 1940's GS-14 was a very high government position.


17 Data on all indicators was obtained for all agencies with the exceptions of backlog data for the FAA and OSHA and of backlog and efficiency data for the PSA.
CHAPTER IV

AGENCY ELITES AND THE AGENCY LIFE CYCLE:
SOME TRENDS OVER TIME

The Study of Agency Elites

This paper has noted at several points the lack of adequate empirical tests of Bernstein's life cycle theory of regulatory commission behavior. Even when this theory is combined with the more generalized views of Downs concerning bureaucratic rigidity cycles in public organizations, little effort has been made to apply measurable data to theory in any systematic fashion. Some literature, however, does report the results of partial empirical tests of the life cycle theory, or at least those parts of the theory which relate to the characteristics of agency elites. These results can be discussed briefly.

A common approach to the analysis of regulatory policy has been an examination of agency elite career patterns. Agency elites are defined as agency commissioners, agency chiefs, and agency senior bureaucrats (meaning, generally, heads of bureaus and upper-level staff personnel). The interest in elite career patterns derives largely from the argument that agencies become captured when individuals committed to the perspective of the regulated interests gain positions within the elite, decision-making stratum of the regulatory commission or agency. Or, if "industry men" are not chosen initially, the argument continues, new commissioners or agency chiefs undergo socialization experiences which eventually bias them toward the viewpoint of the regulated interests. Since scholars cannot directly
ascertain the perspectives of individual members of the regulatory elite from outside observation, they assume that the movement of public officials upon resignation or retirement into the regulated sector is an indicator of some previous unsavory, or at least suspicious, connection between the two. Bernstein explicitly incorporated this assumption into this life cycle theory, and this perspective is shared by others.¹

Three recent analyses based largely on the assumptions stated above are discussed here. Two deal specifically with regulatory agencies and regulatory policies per se, while the third concerns the policy behavior of an agency with both regulatory and non-regulatory functions. The most thorough and extensive of these studies is that by Graham and Kramer for Senator Magnuson's Commerce Committee study of regulation.² Graham and Kramer make an exhaustive narrative analysis of the Presidential appointments to the FCC and the FTC between 1949 and 1974. They found that 24 out of 58 members appointed between 1949 and 1974 found subsequent private employment in agency-related work.³ This amounts to nearly 42 per cent. However, only 11 out of 58, about 19 per cent, had prior service with the regulated industry.⁴

Graham and Kramer indicate that these results are an artifact of the appointments process. They identify a number of factors as being crucial in the Presidential decision to appoint a particular individual to a particular commission:

(1) Political sponsorship or access to the nominations process...; (2) the controversial candidate is, in most instances, avoided, (3) regulatory philosophy and prediction of future performance are important although they are sometimes eclipsed by overriding partisan priorities;
(4) age, sex, race, health, personality, professional background, and geography are considered but rarely controlling; and (5) tactical decisions, such as timing.

The controversial candidate is likely to be the one who has had an obvious blatant connection with the regulated interest, or has expressed strong views on matters related to the agencies' activities. Not only are such individuals less likely to be considered initially by the President for appointment, but are also those most likely to be rigorously grilled and perhaps rejected by the Senate. Another factor impinging on the selection of members of the regulated industry, as noted by Graham and Kramer, is "the lack of truly outstanding aspirants who are interested in appointment." Generally, the rewards in the private sector for outstanding performers are greater than the dubious rewards of public service on a regulatory body. Graham and Kramer conclude, then, that in at least two independent commissions recruitment from the regulated industry is not as serious a problem, in the sense of being a major source of agency capture, as has been supposed.

The benefits of moving into the regulated sectors after an agency job are another matter altogether.

FTC and FCC Commissioners are principally, almost exclusively exposed to the private interests they regulate. Partly because of that fact, most regulators become advisors or advocates of these interests following their tenure on the Commissions. . . . [I]n the present context, it is unrealistic to expect anything else. Like everyone else, Commissioners do the things that come naturally; they enter a career which has a relationship to their regulatory service and utilize the particular knowledge and expertise that they gained in that position.
This has two consequences. One, mentioned by Graham and Kramer, is that the commissioners become "top-notch advocates" for the private, regulated sector—adding another obscuring factor to the diminishing differences between the public and private sectors. The other consequence, not specified by Graham and Kramer but implicit in their analysis, is the tendency of an individual looking toward a career in the regulated industry to avoid flagrant offenses to those interests while he is in office. Although prospects of a post-agency career are probably not always uppermost in the minds of regulators, such prospects may have more than marginal significance in some instances. The strongest conclusion that can be drawn from the Graham and Kramer study of two agencies over a 25-year time span indicates that agency recruitment is less likely to be affected by the regulated interests than is the behavior of appointees once they obtain a position in the agency.

A study by George Stigler of commissioners and bureau chiefs in two regulatory commissions, the FTC and the Securities and Exchange Commission (SEC), derives conclusions similar to those of Graham and Kramer, who, however, did not include bureau chiefs in their analysis. Stigler reported the distribution of the total years spent by agency elites in legal practice and private business between the time they left the regulatory agency and their final retirement or death. These figures are shown in Table 4-1.

Obviously, there is considerable movement on the part of the personnel of these two agencies into the private sector following their period of public service. Although Stigler does not specify
TABLE 4-1
DISTRIBUTION OF YEARS FROM LEAVING REGULATORY AGENCY
TO RETIREMENT OR DEATH
(Figures are in Percentages)

<table>
<thead>
<tr>
<th></th>
<th>Commissioners</th>
<th>Bureaucrats</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SEC FTC</td>
<td>SEC FTC</td>
</tr>
<tr>
<td>Legal Practice</td>
<td>29.6 55.0</td>
<td>50.0 35.7</td>
</tr>
<tr>
<td>Business</td>
<td>36.5 4.0</td>
<td>4.3 0.0</td>
</tr>
<tr>
<td>N=38 N=34</td>
<td>N=30 N=3</td>
<td></td>
</tr>
</tbody>
</table>


that his categories of "legal practice" and "business" actually indicate direct involvement with the regulated interest, evidence from Graham and Kramer, and from the data collected for this paper, indicates that such activity is likely to be for the benefit of regulated industries.

With regard to the approach of regulators to the regulated industry when they are in office, Stigler states that:

The regulator who seeks to maximize his utility subject to continuance in office—or related political or industry work thereafter—must avoid open conflicts with the regulated industry. A regulator must have cooperation in achieving either the appearance of the substance of any regulatory goals. . . . The industry can be helpful at every turn. . . . The regulator reciprocates by supporting those policies. . . which contribute to the "stability" and "responsibility" of the industry.

Again, the evidence here is that what happens to the regulator in office is more important in determining his behavior toward the
regulated interests than is the source of his original recruitment into
the agency.

A third study of elite career patterns can be mentioned briefly,
although it does not directly concern regulatory agencies as such. In-
stead, Hadwiger's study of the career patterns of the leaders in the
Department of Agriculture (USDA) and in the Department of Health,
Education, and Welfare (HEW) is an example of the use of the elite
career approach to explain agency "capture" in a largely non-regulatory
setting.\textsuperscript{12} Hadwiger attempts to demonstrate that the leadership of
the USDA in comparison with that of HEW has become too "old, too
comfortable, too homogeneous, and unfeeling toward environmental, con-
sumer, and welfare interests."\textsuperscript{13} Unfortunately, Hadwiger does not
systematically relate agency ossification to elite background charac-
teristics. While USDA and HEW elites differ substantially in terms of age, regional and vocational background, and education, these
differences are not rigorously linked to agency behavior patterns.
The strongest statement made is that "USDA personnel are similar
enough in background and in occupational socialization to support a
'consensual,' rather restricted value system."\textsuperscript{14} Hadwiger does not
demonstrate that the existence of such a supposed homogeneous value
system is closely related to agency policy, although several anecdotes
along that line are offered as evidence. The Hadwiger study, while
disappointing, is an example of the manner in which elite characteristics
are often used to explain the behavior of agencies.\textsuperscript{15}

\textbf{Agency Elites in the Present Context}

The three studies cited here indicate a potential use for data
obtained from surveys of elite characteristics. These studies, however, all share a major shortcoming. They fail to integrate the data gained into a fuller test of the theory of agency life cycles. Isolated from the theory, results can only be suggestive and partial, leaving the broader questions of the theory's accuracy and utility unresolved. While the rationalization for examining career patterns—that prior service, or the promise of subsequent service, in the regulated industry serves to bias the perspective of the regulatory—is derived from the life cycle theory, the theory itself is not considered inclusively. More specifically, the agency elite characteristics approach, as it is typically used, does not take into account (1) other factors which check the tendency of individual members to view regulatory problems strictly from the viewpoint of the regulated interests, and (2) the presence of other elements in the theory of agency capture, such as the importance of political support, or, more abstractly, agency environment. To avoid similar pitfalls, the emphasis is this paper is on carefully setting out the stated and implied variables in the agency life cycle theory, the specification of operational indicators of these variables, and, finally, quantifiable measures of these indicators. Only by testing all of the components of the theory so stated can the error be avoided of testing one part of the theory and concluding from the test that the validity of the while theory has thus been demonstrated. In order to test the model derived from the life cycle theory, both longitudinal and cross sectional approaches are used. The presence or absence of trends over time provide a clearer picture of regulatory agency life patterns. Therefore, in addition to examining the static distribution of elite
characteristics in this chapter, a measure of association (Pearson's $r$) is obtained between the chronological age of each agency and a number of variables relating to agency capture, support, and rigidity. Such an approach will clarify the context in which elite characteristics must be considered.

For the analysis of agency elite characteristics, a sample was generated by obtaining the names of all agency commissions are selected agency top-level bureaucrats from the year of the agency's origin to 1974. These names were obtained primarily from the Government Organizational Manual for each two-year period covered by the Manual. For agencies existing prior to 1939, names were obtained from agency annual reports for those years. Biographical data was obtained from various editions of Marquis' Who's Who in America, and Who's Who in Government, both of which are standard biographical sources. Biographical information was not available for all of the names taken from the organizational listings, but information was obtained in 295 cases. These cases form the data base for the elite background analysis. The elite data is a rather comprehensive picture of regulatory elites in eight agencies over their entire existence. Since such a descriptive profile has not hitherto been obtained, the information presented in this chapter will be of interest to scholars concerning themselves with the regulatory agencies. The tables shown below report the percentage distribution of elite characteristics across all of the agencies in the study. Agencies with the longest existences, therefore, are more heavily represented in these figures.

Agency Elites and Agency Rigidity

Table 4-2 indicates a marked uniformity in the career patterns
<table>
<thead>
<tr>
<th>Distribution of Prior Experience</th>
<th>Commissioners</th>
<th>Bureaucrats</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In Regulated Industry..........</td>
<td>14.2</td>
<td>15.0</td>
<td>14.6</td>
</tr>
<tr>
<td>2. In Other Private Businesses...</td>
<td>78.4</td>
<td>60.2</td>
<td>71.2</td>
</tr>
<tr>
<td>3. In Governmental Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Congress</td>
<td>22.8</td>
<td>6.8</td>
<td>15.6</td>
</tr>
<tr>
<td>b. Work for President</td>
<td>6.2</td>
<td>4.8</td>
<td>5.1</td>
</tr>
<tr>
<td>c. Other State or National Service</td>
<td>58.6</td>
<td>65.7</td>
<td>61.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Distribution of Experience After Leaving Agency</th>
<th>Commissioners</th>
<th>Bureaucrats</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Regulated Industry</td>
<td>11.7</td>
<td>6.0</td>
<td>9.2</td>
</tr>
<tr>
<td>2. Other Private Business</td>
<td>24.7</td>
<td>13.0</td>
<td>19.3</td>
</tr>
<tr>
<td>3. Other Government Service</td>
<td>17.3</td>
<td>26.3</td>
<td>21.4</td>
</tr>
<tr>
<td>4. Education</td>
<td>3.7</td>
<td>0.1</td>
<td>2.4</td>
</tr>
<tr>
<td>5. Not Working/No Information</td>
<td>27.2</td>
<td>36.9</td>
<td>30.7</td>
</tr>
<tr>
<td>Still Active in Regulatory Agency</td>
<td>14.2</td>
<td>16.5</td>
<td>15.3</td>
</tr>
</tbody>
</table>

of both civil servants and appointed commissioners. In terms of prior career experience, only about 15 per cent of either group worked previously for the regulated industry. This conforms with the suggestion made earlier that there are barriers to recruitment from the regulated industry. On the other hand, a somewhat surprising result is the relatively low percentage of both civil servants and commissioners who leave their agencies to enter the regulated industry in a private capacity. The figure here is only about 9 per cent overall, although commissioners show a greater tendency to enter such employment, as
might be expected considering their essentially political positions
and their greater potential for contacts at the upper levels of both
agency and industry hierarchies. Additionally, the data sources used
did not always allow the determination of whether or not the "private
business" agency elites entered when they left the agency was connect-
ed with the regulated industry. Often the businesses listed were law
or private consulting firms. Given the nature of lobbying activities in
Washington, D.C. it is probable that many of these firms were retained
by the regulated interests. If so, then the number of agency elites
entering the private sector as advocates of the regulated industry would
be a higher figure than is indicated in the table. However, even with
a higher figure, the percentages would probably not be much greater than
the 21 per cent of agency elites who move to other governmental agencies
after they leave their regulatory posts. No surprisingly, considering
their career public service status, more civil servants, about 21 per
cent, moved to other government jobs than did commissioners, about 17
per cent of whom made such a transition. The relative difference of
about 10 per cent is also reflected in the percentages of prior
government service. So, even though no remarkable disparities present
themselves in these career pattern data, there are some noticable
differences in some areas between higher civil servants and agency
commissioners.

The life cycle theory predicts that the rates of agency re-
cruitment of individuals from, and individual post-service movement
into, the regulated industry should reflect an increase of growth
over time. That is, the correlation coefficients between the
chronological age of the agency and the measures of recruitment
from and retirement to the regulated industry should be positive if
the theory is accurate in its predictions. 19 The coefficients in
Table 4-3 show, however, that this is not the case. Recruitment
from and movement to the regulated industries is declining with age
more than increasing. Only the FCC and the FTC show a tendency to
recruit more from the regulated industries over the whole period
of their existences. The retirement figures show an even more
uniform reversal of the theoretical predictions. These figures should
not be considered as surprising in light of Graham and Kramer's
contention that extensive recruiting from the regulated industries
is "bad politics." The passage of time also allows the generation
of expertise within the agencies which reduces the necessity of
depending on the regulated industries as the sole source of competent
personnel.

The life cycle theory is most clearly contradicted by the
results in Table 4-3. The rate of movement to the regulated industries
decreases in all agencies but the FCC, where the relationship is
only mildly positive (r=.14). There are at least two possible
explanations for this tendency. First, movement into legal or con-
sulting firms, where they were not clearly connected with the re-
gulated interest, was distinguished in the data coding from movement
into the regulated industry, per se. Therefore, the figures might
show a lesser negative relationship if the connections of these
firms with the regulated industries were known in all cases. The
second possible explanation here is simply that the idea that agency
personnel are "rewarded" with jobs for "service" to the regulated
industry while in public office may be too crude and exaggerated to
<table>
<thead>
<tr>
<th>CAB</th>
<th>FAA</th>
<th>FCC</th>
<th>FTC</th>
<th>NLRB</th>
<th>NTSB</th>
<th>OSHA</th>
<th>PSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>-.63</td>
<td>-.91</td>
<td>.44</td>
<td>.41</td>
<td>-.62</td>
<td>.07</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

**Percentage of Agency Elites Recruited from the Regulated Interests**

| Percentage of Agency Elites Retiring to the Regulated Interests** |
|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| -.61                   | -.85            | .14             | -.03            | -.60            | *               | *               | *               |

**NOTE:** Tests of significance are not reported in this and in following tables. Such tests are applicable only when data is derived from a random sample. Since the data here is derived from the universe of agency years, rather than a sample, significance tests are inappropriate.

*Indicates that correlation coefficient could not be calculated.

**"Retirement" here means actual retirement as well as post-regulatory career service."
be supported by the data available (or any other data, for that matter). A few blatant cases of this sort, such as that of Wayne Coy or George McConnaughey, may have blinded observers to more tenuous nature of this relationship across many agencies. 20 Or, if some agencies are more culpable in this respect than are others, they are all lumped together without distinction when charges are made concerning favoritism toward the regulated industries. In short, our previous argument that "capture" is a more complex phenomenon than generally has been supposed seems to be at least partially borne out by this analysis. 21

An alternate source of recruitment for the regulatory agencies is from within their own organizations. The relative distribution of "insiders," individuals moving into top agency positions after serving in lower-level positions in the agency, and of "experts," individuals who have gained skills in specific regulatory areas through prior service in either the private or public sectors again serve as indicators of increasing agency tendencies toward rigidity. Civil servants, as Table 4-4 shows, are heavily represented in both of these categories, about 61 and 80 per cent respectively. The commissioners were less well-represented in these respects, about 21 and 46 per cent of these individuals falling into the two categories. The rates of recruitment of "insiders' and "experts" has also tended to increase over time, as shown in Table 4-5. These results again emphasize the importance of the long-term career pattern of the civil servant for the staffing of the regulatory agencies. The career bureaucrat stays with the government long enough to gain the skills and the background necessary for
TABLE 4-4  
DISTRIBUTION OF AGENCY "INSIDERS" AND "EXPERTS"

<table>
<thead>
<tr>
<th></th>
<th>Commissioners</th>
<th>Bureaucrats</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Members of</td>
<td>21.0</td>
<td>60.9</td>
<td>39.0</td>
</tr>
<tr>
<td>Agency Elites classified</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>as &quot;Insiders&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Members of</td>
<td>46.3</td>
<td>79.7</td>
<td>61.4</td>
</tr>
<tr>
<td>Agency Elites Classified as</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Experts&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

the day-to-day operations of the regulatory agencies. Commissioners tend to be more transient and to bring less skills and experience related to regulatory performance into the regulatory agencies with them. Table 4-6 clearly illustrates the differences between commissioners and bureaucrats in terms of longevity. Commissioners, who are older by and large at the time of their initial appointments do not remain in the agencies as long as civil servants. This confirms the suggestion made by Graham and Kramer that agency commissioners do not necessarily perceive their appointments as the end of their careers. Such appointments are often viewed as way stations on the road to other activities which are viewed as more psychologically, if not materially rewarding than service with the regulatory agencies. The increase in the average age of agency executives, and the rate of elite turnover as reported in Table 4-7 can be viewed as substantiating the point that rigidity tends to increase with time in the regulatory agencies. The age of agency executives shows a
TABLE 4-5
PERSON CORRELATION COEFFICIENTS (r) INDICATING RELATIONSHIP OF AGENCY AGE TO THE RECRUITMENT OF "INSIDERS" AND "EXPERTS"

<table>
<thead>
<tr>
<th></th>
<th>CAB</th>
<th>FAA</th>
<th>FCC</th>
<th>FTC</th>
<th>NLRB</th>
<th>NTSB</th>
<th>OSHA</th>
<th>PSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Members of Agency Elites Classified as &quot;Insiders&quot;</td>
<td>-.21</td>
<td>.77</td>
<td>.32</td>
<td>.81</td>
<td>.77</td>
<td>.47</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Percentage of Members of Agency Elites Classified as &quot;Experts&quot;</td>
<td>.31</td>
<td>.10</td>
<td>-.13</td>
<td>.34</td>
<td>.68</td>
<td>-.20</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

*Indicates that correlation coefficient could not be calculated.
TABLE 4-6
LONGEVITY OF REGULATORY AGENCY ELITES IN YEARS

<table>
<thead>
<tr>
<th></th>
<th>Commissioners</th>
<th>Bureaucrats</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Age at Appointment</td>
<td>45.9</td>
<td>38.6</td>
<td>41.7</td>
</tr>
<tr>
<td>Average Age at Retirement</td>
<td>54.1</td>
<td>48.9</td>
<td>51.7</td>
</tr>
<tr>
<td>Average Term in Office Completed</td>
<td>8.2</td>
<td>12.5</td>
<td>10.1</td>
</tr>
</tbody>
</table>

Tendency to increase rather strongly, while the rate of turnover decreases or changes only slightly as the agencies age. Turnover rates are also much higher for agency commissioners than for bureaucrats, but this in itself is a good indicator that the agencies will show little disposition for change. Bureaucrats can maintain agency behavior patterns in the face of pressure from the commissioners for change (if the commissioners are ever disposed to impose such pressure, which is extremely doubtful) because the civil servant knows that commissioners will not be with the agency long enough to wear away any substantial resistance. The civil servant knows that he will be there when a commissioner is gone, which allows him to make decisions for the long run and defend them by a policy of patient waiting.

Characteristics of agency elites can also be seen as contributing to agency rigidity in other ways than simply by whether or not they have at heart the best interests of the regulated. These other factors have to do with patterns of human behavior in large organizations,
<table>
<thead>
<tr>
<th></th>
<th>CAB</th>
<th>FAA</th>
<th>FCC</th>
<th>FTC</th>
<th>NLRB</th>
<th>NTSB</th>
<th>OSHA</th>
<th>PSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Age of Members</td>
<td>.88</td>
<td>.89</td>
<td>.23</td>
<td>-.07</td>
<td>.71</td>
<td>-.34</td>
<td>.87</td>
<td>.80</td>
</tr>
<tr>
<td>of Agency Elites</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Annual</td>
<td>-.12</td>
<td>.07</td>
<td>-.12</td>
<td>.09</td>
<td>-.24</td>
<td>-.07</td>
<td>.87</td>
<td>*</td>
</tr>
<tr>
<td>Turnover of Members</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of Agency Elites</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Indicates that correlation coefficient could not be calculated.
especially in American public bureaucracies. These factors seem to center in the development of professionalization in public bureaucracies, and on the sources and nature of agency support, that is, agency relationships with its external environment. Some characteristics of professionalization are reflected directly in the elite data assembled for this paper, while the effects of political support on elites must be presumed from an examination of data which does not pertain so directly to elite characteristics. Each of these factors is examined more fully in the sections which follow. The first factor considered concerns the effects of increasing professionalization among elites in the regulatory agencies.

**Professionalization and Rigidity**

The prior occupational and educational status of both bureaucrats and commissioners in the regulatory agencies is legal, as Table 4-8 indicates. Some 39 per cent of the individuals surveyed were in active legal practice prior to their entry into the agencies. About 58 per cent overall had law degrees. Only government service and prior experience in politics come remotely close to the legal profession in terms of providing the manpower for regulatory administration. There is no need to look far to find the reasons for this condition. The judicialization of regulatory agency procedures practically guarantees that candidates likely to be viewed as most suitable for carrying out regulatory functions are those with legal experience. Many of the professional politicians who serve on Commissions are, of course, lawyers as well, adding still another significant increment to the legalistic tendencies of the agencies. The dominance of legal
<table>
<thead>
<tr>
<th>Prior Occupational Status</th>
<th>Commissioners</th>
<th>Bureaucrats</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>7.4</td>
<td>3.0</td>
<td>5.4</td>
</tr>
<tr>
<td>Economics</td>
<td>1.9</td>
<td>3.8</td>
<td>2.7</td>
</tr>
<tr>
<td>Education</td>
<td>1.2</td>
<td>.8</td>
<td>1.0</td>
</tr>
<tr>
<td>Engineering</td>
<td>3.7</td>
<td>9.2</td>
<td>6.1</td>
</tr>
<tr>
<td>Government</td>
<td>18.5</td>
<td>41.4</td>
<td>28.8</td>
</tr>
<tr>
<td>Journalism</td>
<td>2.5</td>
<td>.1</td>
<td>1.7</td>
</tr>
<tr>
<td>Labor</td>
<td>.6</td>
<td>0.0</td>
<td>.3</td>
</tr>
<tr>
<td>Law</td>
<td>41.4</td>
<td>36.1</td>
<td>39.0</td>
</tr>
<tr>
<td>Military</td>
<td>1.9</td>
<td>3.0</td>
<td>2.4</td>
</tr>
<tr>
<td>Politics</td>
<td>20.4</td>
<td>0.0</td>
<td>11.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>Commissioners</th>
<th>Bureaucrats</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>No College</td>
<td>8.6</td>
<td>1.5</td>
<td>5.4</td>
</tr>
<tr>
<td>B.A./B.S.</td>
<td>11.7</td>
<td>20.3</td>
<td>15.6</td>
</tr>
<tr>
<td>M.A./M.S.</td>
<td>1.9</td>
<td>9.8</td>
<td>5.4</td>
</tr>
<tr>
<td>Law Degree</td>
<td>61.7</td>
<td>54.1</td>
<td>58.3</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>3.1</td>
<td>4.5</td>
<td>3.7</td>
</tr>
<tr>
<td>No Degree Listed</td>
<td>12.3</td>
<td>7.5</td>
<td>10.2</td>
</tr>
</tbody>
</table>
norms, so frequently marked in discussions of regulatory agency behavior, begins with the recruitment process.

These results are especially interesting in the light of Mosher's discussion of the effects of increasing professionalization in government service. Mosher argues that certain segments of government service have become increasingly closed to entry by any but members of the career or professional groups which presently dominate these segments. Such groups in effect choose their own replacements by setting certain standards and criteria for entry into the career ranks. Mosher sees adverse effects from this situation when long-range responsiveness and flexibility are called for:

[I]f it [a career system] is called upon to meet sudden needs requiring different kinds of skills or to anticipate and prepare for basic changes in mission, rapid growth, or rapid re-education, it is very inflexible. Its supply of journeymen and leaders within the system at any given time is largely fixed because of its inhibition against lateral entry. Increases for the future must have entered the pipeline years before.

Although this point can be pushed too far, agency rigidity would seem to be encouraged by the predominance of legal norms in the regulatory agencies. Not only do such norms cause a slow and inefficient approach to regulation, as Bernstein argues, but may also tend to institutionalize this pattern over time by virtue of eliminating any but legalistic perspectives and approaches to regulatory problems. Such institutional features would tend to make the agencies unresponsive to changing demands or expectations, as Mosher has suggested.

This situation is apparently not improving as the agencies age. Table 4-9 shows, the trend in all of the agencies but the NTSB is toward
### TABLE 4-9

PEARSON CORRELATION COEFFICIENTS (r) INDICATING RELATIONSHIPS BETWEEN AGENCY AGE AND THE PERCENTAGE OF LAWYERS RECRUITED BY THE REGULATORY AGENCIES

<table>
<thead>
<tr>
<th>CAB</th>
<th>FAA</th>
<th>FCC</th>
<th>FTC</th>
<th>NLRB</th>
<th>NTSB</th>
<th>OSHA</th>
<th>PSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>.05</td>
<td>.03</td>
<td>.21</td>
<td>.87</td>
<td>.63</td>
<td>-.72</td>
<td>*</td>
<td>.08</td>
</tr>
</tbody>
</table>

Percentages of Members of Agency Elites Classified as Lawyers

*Indicates the correlation coefficient could not be calculated.
the recruitment of more lawyers. This is fairly strong evidence that the recruitment horizons of the agencies seem to narrow with the increasing age of the agency. This factor alone would not induce agency rigidity, but it must be considered as a fairly potent contributor.

Support and Rigidity

Not all of the circumstances contributing to the growth of agency rigidity have their origins in the backgrounds or perspective of agency elites. Some of these factors originate as the agencies struggle to maintain themselves in a variable external environment. Such environments may range from benign to turbulent, and may be different at different times in the agency's history. The agency must try and maintain itself, its internal integrity, in the face of such environmental shifts. This struggle is the source of one of the major relationships pertinent to the agency life cycle model as specified by Bernstein and Downs. This relationship is between agency age and agency political support. Bernstein and Downs argue that diffuse political support of the regulatory agencies declines over time, while specific, clientele support increases. This is offered as an explanation of why agencies tend to become captives to their clientele. Agencies must have a reliable source of support in their quest for the annual budgetary increase necessary for program stability and agency growth, and therefore personal security for agency personnel. So the question logically becomes one of agency success in obtaining political support, one of the primary constituents of a predictable environment. This paper has several measures of support
which can be brought to bear on this question. The first few of these measures involve diffuse support, as indicated by the growth or decline of agency budgetary appropriations.

There are three variables associated with budgetary growth in this analysis. The first, "Congressional appropriations growth," is an indicator of the rate of the annual increase in an agency's final yearly appropriation set by Congress. That is, it is a figure obtained by dividing how much Congress appropriated to the agency in one year by the amount Congress appropriated to the agency in the previous year. "Presidential expenditure growth" is the percentage rate of growth of the yearly presidential budget request over the previous year's Congressional appropriation. In other words, the figure is derived by dividing how much the President's budget allowed the agency in one year by the amount appropriated by Congress in the previous year. "Appropriations success" is the percentage of the President's annual budget request for the agency which is finally appropriated by Congress. This figure is obtained by dividing how much the President's budget awarded the agency in a year into how much Congress appropriated for the agency in that year.27 Predications based on the life cycle model indicate that as an agency ages, it will have increasing difficulty in winning adequate funds for its activities from both the President and Congress. Essentially, agencies will be penalized by the President and Congress for slowdowns in agency activities and for the decreased interest in and enthusiasm for regulation once the symbolic demands for regulation have been met. This assertion would seem to be supported by the coefficients obtained in Table 4-10.
<table>
<thead>
<tr>
<th>Percentage Growth of Annual Congressional Appropriations for Agency</th>
<th>CAB</th>
<th>FAA</th>
<th>FCC</th>
<th>FTC</th>
<th>NLRB</th>
<th>NTSB</th>
<th>OSHA</th>
<th>PSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage Growth of Annual Presidential Expenditures for Agency</td>
<td>-.17</td>
<td>-.44</td>
<td>-.19</td>
<td>-.17</td>
<td>-.36</td>
<td>-.92</td>
<td>*</td>
<td>-.45</td>
</tr>
<tr>
<td>Percentage Growth of Annual Appropriation Success in Agency</td>
<td>-.62</td>
<td>-.63</td>
<td>-.24</td>
<td>-.02</td>
<td>-.33</td>
<td>-.95</td>
<td>*</td>
<td>-.92</td>
</tr>
<tr>
<td>Percentage Growth of Annual Appropriation Success in Agency</td>
<td>.28</td>
<td>.46</td>
<td>-.20</td>
<td>.33</td>
<td>-.19</td>
<td>.69</td>
<td>*</td>
<td>.73</td>
</tr>
</tbody>
</table>

*Indicates that correlation coefficient could not be calculated.
Congressional and Presidential budgetary growth rates decline as the agency ages. However, these figures are somewhat misleading. If the year-by-year figures are examined for all of the agencies, the pattern that emerges is that of an initial burst of growth which later slows. Agencies usually start with small budgets which grow rapidly in earlier years, than slow down. At that point, budgetary growth begins to fluctuate, some years slightly upward, some years slightly downward. Some agencies will have peaks of growth which will reverse an apparent trend. The NLRB experienced such a reversal in the late 1940's and the very early 1960's. The FTC has also enjoyed considerable increases in the rate of Congressional appropriations growth throughout most of the 1960's and 1970's, with the exception of the period between 1965 and 1970, the Vietnam era. So, the budgetary growth rate actually experienced by regulatory agencies is not a smooth curve sloping downward, but tends to be much more erratic than the life cycle theory predicts.

The coefficients obtained for agency appropriations success shows an interesting reversal of the patterns evidenced in the Congressional and Presidential growth rates. Here the coefficients are, with two exceptions, positive. This indicates that agency budgetary success as defined here is actually independent of agency budgetary growth. What has happened to produce this result is that Congress, especially in recent years, has consistently given more to the agencies than was requested for them by the President's budget. In this light, Congress can be viewed as assuming the role of protector of the regulatory agencies against the budget-reducing proclivities of the President. This is not predicted by Bernstein's theory, but it
does make sense with respect to what is known about the relationships of Congressional committees and subcommittees, executive agencies, and interest groups. These form specialized subsystems of influence within the government for mutual benefit and protection. As a consequence, even though the rate of the budgetary growth declines with time, budgetary success, that is, gaining more than is requested, for the agencies is increased. Congress, therefore, must be cast in a more ambiguous role than is suggested by Bernstein, although his predictions of agency budgetary woes induced by the President appears to be substantially accurate.

Of course, budgetary success may not be the only or even the best indicator of diffuse support. Ineed, if Presidential and Congressional statements are taken at their face value, the regulatory agencies should be in much deeper trouble than they are. The remarks by President Ford quoted in the first chapter are a good example of the kind of rhetoric attendant upon discussions of regulatory problems at the national level. Talk is cheap, however, and while the regulatory agencies have not made vast gains in budgetary growth, neither have they been subjected to any really severe cuts. Nor have any of the agencies selected for this paper even been stripped of any of their major regulatory functions, with the exception of the CAB, whose air traffic safety function was transferred to the FAA in the 1950's as a result of charges and criticism growing out of a disastrous air crash. Indeed, in spite of the hue and cry against the "evils" of regulation, the regulatory agencies have often been pressed to take a more active view of their roles, particularly with
regard to consumer protection.

So, while diffuse support may have declined as it is measured by the indicators used here, a substantial residue remains. With regard to the expected scope of this remaining residue, both Bernstein and Downs are silent, but it cannot be presumed that either would argue that agencies can expect severe reductions in what they have already gained at any given time. Bernstein implies that the agencies just cannot expect to do as well every year as they do in the first few years in terms of appropriations growth and success. This, in fact, seems to be the case.

Both Bernstein and Downs also make predictions about the growth of clientele support for the agencies as they age. The growth of such support is, in their view, is positively associated with agency capture and rigidity, and negatively associated with the countervailing trend of increasing diffuse support. Again, however, the data collected here show that matters are not so simple nor so readily interpretable. The measure of specific support used in this paper is a composite variable obtained by coding the testimony of witnesses for or against a regulatory agency, or its programs, in the annual House Appropriations subcommittee hearings for that agency. While such testimony was not so frequent as to yield a totally reliable sample, some tentative conclusions can be drawn on the basis of the testimony that was presented before the concerned subcommittees. Table 4-11 shows that specific support of the agencies tends to increase as the agencies get older, except in the case of the Packers and Stockyards Administration, which has failed to win the support of a major group of livestock to keep their
**TABLE 4-11**

PEARSON CORRELATION COEFFICIENTS (r) INDICATING RELATIONSHIP OF AGENCY AGE TO POLITICAL SUPPORT

<table>
<thead>
<tr>
<th>CAB</th>
<th>FAA</th>
<th>FCC</th>
<th>FTC</th>
<th>NLRB</th>
<th>NTSB</th>
<th>OSHA</th>
<th>PSA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Percentage of Specific Political Support Won by Agency

| .17 | .01 | .10 | .01 | .21 | *    | .93  | -.73 |

*Indicates that correlation coefficient could not be calculated.
clientele or concerned parties satisfied, at least as indicated by the overall supportive tone of remarks before Congress.

The general direction of the political support trends, both specific and diffuse, are in general conformance with theoretical predictions. However, it must be noted that while the overall trend is predicted more or less accurately, the rather substantial amounts of variation between agencies is not so well predicted by the theory. The life cycle theory posits a regularity and a uniformity which is at variance with the actual trends in the regulatory agencies examined in this research.

While the growth of professionalization, and the erratic performance of political support indicators, in the regulatory agencies have their own intrinsic interest, some consideration must be given to how these variables affect the performance of regulatory agencies. While no complete description can be given here, either in this chapter or in this paper as a whole, some patterns developed from the data will be of interest and will serve to help draw some tentative conclusions concerning the relationship of agency performance to agency elite characteristics, agency political support, and agency aging.

Agency Performance

One of the effects of agency aging, according to the life cycle model, is an increase of agency workload which, when combined with the judicialization of procedures, leads to increased agency backlogs—work which is not completed from one year to the next. An increase in backlogs is viewed in the theory as the mechanism which
triggers Presidential and Congressional dissatisfaction with regulatory performance which in turn leads to declining rates of budget growth. Already we have seen that the theory is not entirely accurate in its assessment of the budgetary indicators, so it comes as no surprise to find that the theory is not completely accurate in its predictions concerning the growth of backlogs, an important measure of agency performance. As Table 4-12 shows, of the five agencies with available backlog data, the backlog percentages actually decrease with time in three of them. This unexpected decline in backlogs may be attributable to the increases in efficiency which can be noted in several of the agencies. This figure is also shown in Table 4-12. Efficiency is calculated as an index of the combined ratios of the casework handled by the agency in a single year to the number of personnel employed by the agency during that year. No strong correspondence between decreases in backlog and increases in efficiency appears, however, to support this surmise. An alternate explanation is that the limited measures available do not tap all of the dimensions of agency activity which together make up the agency's "real" backlog and efficiency indexes. Lacking such ideal data, the analysis here may suggest that the theoretical model's predictions are incorrect. Additionally, the correlation between the backlog scores and all three budgetary growth indicators for all agencies taken together is positive, indicating that budgetary growth occurs in spite of any increase in backlogs. In short, the diffuse support given the regulatory agencies does not seem to be strongly linked with the quality of the agencies' performance as their age increases.
TABLE 4-12

PEARSON CORRELATION COEFFICIENT (r) INDICATING RELATIONSHIP OF
AGENCY AGE TO TWO PERFORMANCE INDICATORS

<table>
<thead>
<tr>
<th></th>
<th>CAB</th>
<th>FAA</th>
<th>FCC</th>
<th>FTC</th>
<th>NLRB</th>
<th>NTSB</th>
<th>OSHA</th>
<th>PSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Undisposed Cases in Agency per Annum—&quot;Backlogs&quot;</td>
<td>- .41</td>
<td>*</td>
<td>- .10</td>
<td>.11</td>
<td>- .31</td>
<td>.85</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Ratio of Number of Cases Disposed per Annum by Agency to Number of Personnel—&quot;Efficiency&quot;</td>
<td>.81</td>
<td>- .41</td>
<td>.09</td>
<td>- .61</td>
<td>.06</td>
<td>.80</td>
<td>.75</td>
<td>*</td>
</tr>
</tbody>
</table>

*Indicates that correlating coefficient could not be calculated.
Insofar as agency performance and budgetary growth are not closely related, we should not expect performance to materially affect the personnel structure of the regulatory agencies. The reverse might be true, however. That is, certain characteristics of the agency personnel structure might be expected to have some impact on agency performance and, ultimately, on the development of patterns of agency rigidity. For instance, organization theory predictions that a proliferation of upper-level positions creates more opportunities for the "editing" of messages passing through the agency, both from within and from outside of the organization, might be appropriate here to characterize some of the problems faced by the regulatory agencies. Another consequence of an expanded personnel structure is an expanded hierarchy through which any proposed action must pass, affording more opportunities for any particular action to be stalled at a given point. Both of these effects can have serious consequences for agency performance. One consequence is a reduction of the agency's ability to react quickly to environmental change. Another consequence is that information reflecting unfavorable on individual or organizational performance will show a greater tendency to be hidden from top-level decision-makers, or will reach them in a form so altered that the possibility is increased of making "wrong" decisions. These effects and consequences can in turn become part of the tendency of older agencies to become more inflexible and conserving in their behavior, or rigid, as it is called here. For regulatory policy, this means a tendency to maintain traditional behavior patterns and established approaches, even when those patterns and approaches have come under fire by outside critics.
With these points in mind, it is worthy of note that while the proportion of the total number of Civil Service grades GS-14 or higher to the total number of personnel in the agency, the "growth in supergrades, increases with the agency of the agency, the growth rate of these same grades from year to year, the "annual grade growth," declines in all but three cases, two of which, the CAB and the FTC have only weak positive relationships while the third OSHA, is a new and still-expanding agency. These relationships are portrayed in Table 4-13. The agencies surveyed for this paper can be viewed, then, as expanding slowly at the upper grade levels. We can speculate that while the regulatory agencies have not been overly successful at expanding the total growth rate of their personnel, they have been successful in expanding the number of higher General Schedule and Schedule C employees relative to the total number of employees in the agencies. This matches a similar trend toward grade inflation in the federal government as a whole, the regulatory agencies being only part of this larger trend. It is impossible to tell from the present data whether this grade proliferation at the upper levels of the regulatory agencies produces the kinds of adverse consequences mentioned above, but the possibility must be considered as strong that some effects along these lines are produced, if for no other reasons that large organizations are prone to these kinds of dysfunctions.

Agency Elites and the Life Cycle

The thrust of this chapter has been to describe some of the characteristics of regulatory agency elites and the environment under which they are obliged to perform. We have noted that the life cycle
<table>
<thead>
<tr>
<th></th>
<th>CAB</th>
<th>FAA</th>
<th>FCC</th>
<th>FTC</th>
<th>NLRB</th>
<th>NTSB</th>
<th>OSHA</th>
<th>PSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Growth of Supergrades Relative to All Grades in Agency*</td>
<td>.97</td>
<td>.98</td>
<td>.95</td>
<td>.89</td>
<td>.97</td>
<td>.87</td>
<td>.84</td>
<td>.46</td>
</tr>
<tr>
<td>Percentage of Annual Growth in Number of Supergrades in Agency</td>
<td>.07</td>
<td>-.14</td>
<td>-.08</td>
<td>.31</td>
<td>-.28</td>
<td>-.50</td>
<td>.87</td>
<td>-.34</td>
</tr>
</tbody>
</table>

*"Supergrades" are defined in this paper as grades GS-14 and above.
model seems appropriate in its general outlines, but that data derived from the specific circumstances of a number of agencies shows that the trends are by no means as clear and unambiguous as the theory seems to indicate. Rigidity, for instance, is not a direct function of chronological age in and of itself. Instead, it appears to be an artifact of the recruitment patterns of agency elites, wherein opportunities for agency leadership seem increasingly closed to all but those with legal training or background, and of the patterns of political support relied upon by the agencies to maintain internal stability in the organization.

What has emerged most clearly from the analysis to this point is a picture of considerable variation across the agencies. The unique characteristics and circumstances of each agency separate it from its companion agencies. While much of this uniqueness "washes out" in the aggregated data used for comparison, enough variation remains to call into some question the uncritical acceptance of the life cycle model as an accurate picture of how regulatory agencies behave. Thus, while there do seem to be forces moving regulatory agencies toward a condition recognizable as "rigidity," simple age is not one of them. However, age is not the only variable in the life cycle model, and the consideration of agency elite characteristics does not exhaust the possibilities for testing the relationships specified in the life cycle model. Specifically, the causal connections between age, political support, agency capture, and agency rigidity have not been examined. These relationships will be tested in the next chapter. Once the causal pathways of the model have been examined, the theory as a whole can be evaluated with regard to the specific hypotheses
that were developed from it.
FOOTNOTES

1 Bernstein, Regulating Business by Independent Commission, p. 83. See also Noll, Reforming Regulation, p. 43, and Ziegler and Peak, Interest Groups in American Society, pp. 169-172.


3 Ibid., p. 422.

4 Ibid.

5 Ibid., p. 395.

6 See fn. 15, Chapter 2.

7 Ibid., p. 399.

8 There is, of course, always an exception. "President Nixon, for instance, stocked the regulatory agencies with men and women who were essentially pro-industry in background, and was very willing to name Commissioners who came directly from the regulated industries." Ibid.

9 Ibid., p. 416.


11 Ibid., pp. 165, 166.


13 Ibid., p. 155.

14 Ibid., p. 160.

15 The studies cited do not exhaust the literature employing elite background characteristics as analytic variables. A noted, although somewhat dated, study which deals directly with federal regulatory commissioners is E. Pendleton Herring, Federal Commissioners (Cambridge, Mass.: Harvard University Press, 1936). Another use of elite characteristics as variables employed in a systematic test of a theory can be found in Kenneth John Meier, "Representative Bureaucracy: An Empirical Analysis," American Political Science Review, LXIX (June, 1975), 526-542. For a general description of the higher federal civil

16. The year of the agency's origin was the date that the agency received its present designation. For instance, the predecessor of the Federal Communications Commission was the Federal Radio Commission, which lasted from 1928 to 1934, when it was transformed into the FCC. Our data was collected from 1934 onwards, and did not extend back into the era of the FRC. For an opposite approach see Herbert Kaufman, Are Government Organizations Immortal? (Washington, D.C.: The Brookings Institution, 1976), especially pp. 25-29.

17. Since the annual reports name only the appointed agency commissioners serving that year, the selection does not include the names of civil servants working in those agencies which were active prior to 1939. Thus, for the FTC, the FCC, and the NLRB, civil servants leaving the agency before 1939 are not represented in the figures.

18. The number of cases (individuals) for each agency is as follows: FAA, 39; FCC, 65; FTC, 70; NLRB, 46; CAB, 56; NTSB, 13; OSHA, 3; and PSA, 3. The total was 295.

19. "Retirement" will be used in a special sense in this paper. The term here denotes the post-regulatory agency service of an individual, not necessarily the end of his working career. Hence, a commissioner might retire to private legal practice and work for many more years after his public service.

20. Wayne Coy was chairman of the FCC under President Truman. During his tenure, he directed the agency in developing a plan for allocating television licenses. "On February 21, 1952, Coy spoke with President Truman and asked that he be 'immediately' relieved of his duties. . . . Within 24 hours, it was learned that Coy had been placed on retainer by Time, Inc. as a 'television consultant.' Time, Inc.--like many other concerns--planned on filing for the maximum of five television licenses. . . . Within 4 weeks of his resignation, Coy was hard at work on those and other projects for his new employer, Graham and Kramer, Appointments to the Regulatory Commissions, pp. 146, 417. George McConnaughey, also an FCC chairman, created a law firm specializing in communications law while he and one of the partners in the firm were holding positions in the FCC "whose activities would generate the principal source of the firm's income and business," Ibid., p. 417.

21. The results obtained here illustrate one of the advantages of using aggregate, comparative data rather than relying exclusively on individual case studies in political research. Case studies tend to focus on the idiosyncratic and the unique. No case is every completely like another. Such uniqueness tends to make generalization hazardous. This usually does not discourage generalizations from being made, however. Aggregate data, on the other hand, is collected and analyzed for the specific purpose of making generalization across many cases.
Although this approach lacks the sharp focus of the good case study, aggregate analysis offers less hazards to thoughtful generalization. In Chapter 6, the suggestion is made that the study of regulatory policy would benefit from both of these approaches.


23 The correlation of agency age with elite turnover in all agencies but OSHA is low enough to cast doubt on any conclusions we might draw here. The results are included because they do show the direction of the relationship of these two variables for all eight agencies. Interestingly, only the strong coefficient for OSHA (.87) really fits the predicted pattern in a fairly conclusive fashion. This pattern probably derives from the fact that OSHA is a relatively new agency which has already become embroiled in considerable controversy. With such controversy, the normally low turnover for a new agency has escalated rapidly. With time, OSHA will undoubtedly resemble the other regulatory agencies with respect to the age/turnover relationship.

24 The disparity between the percentage of individuals having law degrees and the percentage having a prior occupation in law is primarily an artifact of the coding scheme used in collecting the biographical information. Where the individual's previous career was clearly and primarily in government service, he was classified as having a prior occupation of "government official" rather than "lawyer," even though some thus classified as government officials had legal training. As a consequence of this coding scheme, the more representative figure here, in terms of the true distribution of legal expertise at the higher echelons of the regulatory agencies, is that of the percentage of regulators having law degrees. Since this figure is about 58 per cent overall, lawyers clearly dominate in the agencies, at least in terms of filling the higher-level positions.


26 Ibid., p. 151.

27 This approach was suggested by a similar analysis in Fenno's study of the House Appropriations Committee. See Richard J. Fenno, The Power of the Purse (Boston: Little, Brown and Company, 1966).

28 A description of these triangular relationships is found in J. Leiper Freeman, The Political Process: Executive Bureau-Legislative Committee Relations, Revised Ed. (New York: Random House, 1965).

29 For a description of how some agencies come to receive more budgetary largesse from the Appropriations Committee than the President requested for them, see Aaron Wildavsky, The Politics of the Budgetary Process, 2d ed. (Boston: Little, Brown and Company, 1974).
The budget of the CAB reflects some drastic reductions in some years, but these are the result of lessened subsidies to air carriers.

Where a coefficient could be computed, only the FTC and the NLRB showed a decrease in backlogs associated with an increase in efficiency. For the CAB, FCC, and the NTSB the backlog and efficiency rates showed a positive association.

CHAPTER V

MODELS OF THE LIFE CYCLE

The Analytic Approach

The analysis in the previous chapter has suggested that age is not a crucial determinant of agency behavior, and that the regulatory agencies display widely varying behavior patterns rather than exhibiting any substantial uniformity. The conclusions were reached, however, based on only partial examination of the data. The present chapter will explore further relationships in the data in order to determine whether the causal linkages specified in the life cycle model are accurate or whether new linkages should be specified. By testing all of the predicted relationships in a series of models, the conclusions drawn from the analysis of agency elite characteristics can be reinforced or modified.

The analytic approach of this chapter is derived from the argument that the concepts of political support, agency rigidity, and agency capture specified in the life cycle model actually consist of a number of underlying variables, each of which represents some part of the whole phenomenon called support, capture, or rigidity. Through the use of a statistical technique called factor analysis, these underlying variables can be combined to produce single variables which represent support, rigidity, and capture to the extent that the data have captured and measured the existence of these phenomena. The variable, "age," which is composed of only a single indicator, is used in its raw data form in the analysis.

The technique of factor analysis was used in this chapter to
construct variables. These variables were then employed in two further analytic steps. First, canonical correlation and multiple regression techniques were applied to the variables to assess the strength of their relationships to one another, and, second, the coefficients obtained from canonical correlation and multiple regression analyses were subjected to a variance partitioning technique to assess the strength of the variable relationships with respect to theoretical predictions concerning the presumed direction of that relationship, i.e., positive or negative. The final result of the analysis is an empirical weighting of the various causal paths specified in the model. This in turn allows us to state the "true" model of relationships for each agency, and for all of the agencies combined. Knowing this "true" model structure, we can then assess the accuracy of life cycle theory as derived from the conceptualizations of Bernstein and Downs. We are then in a position to make some recommendations concerning the kinds of actions which are most likely to further the goals of regulatory reform.

Construction of the Variables

Kerlinger and Pedhazur note that the basic purpose of factor analysis "is to discover unities or factors among many variables and thus to reduce many variables to fewer underlying variables or factors."\(^1\) Such factors are obtained from the intercorrelations among the variables. If the correlations between the variables are zero or near-zero, factors will not emerge. Higher correlations, however, will cause one or more factors to appear. These factors are constructs, hypothetical variables that reflect shared variances
among the measured variables. Factor analysis, in effect, creates new variables made up of the shared common variance of several partial measures, each of which measures some part of the whole phenomenon.

An important aspect of factor analysis is the correct interpretation of the factors derived, a responsibility of the researcher. Often such interpretation requires considerable ingenuity because the factors produced are not always readily interpretable. If the factors are interpreted carefully, they can be extremely useful in making sense out of what might seem to be many unrelated measures. The technique yields the maximum advantage when the researcher is armed with a theory or model which predicts what factors should emerge from his data set. Where and when such factors can be interpreted in explicitly theoretical terms, they can be used with a great deal of confidence as new variables in further analysis. Without the use of theory, however, factor analysis can become merely a technique for "data dredging" and is best avoided. In this research, the life cycle theory was available to help interpret the factors developed.

The technique employed for this paper was R-factor analysis, which determines which of the measured characteristics in the data vary together. The factor matrix derived was subjected to an orthogonal rotation, but the most readily interpretable configuration was the original, unrotated matrix. In this paper factor analysis was applied only to the variable sets making up political support and agency rigidity. Agency age and agency capture were measured by only one and two variables, respectively. The analysis developed
three factors from both the support and rigidity variables included in the data set. Four of these factors were easily interpretable, while two others were somewhat less so. All factors, however, were included in further analysis.

Six factors were obtained. For political support, three factors were in evidence: Diffuse Support, Qualitative Support, and Specific Support. The factor loadings are shown in Table 5-1. Diffuse Support consisted of those measures of support most closely connected with the budget performance of the regulatory agencies, an important dimension of Presidential and Congressional support. Specific support was exemplified by high loadings on those variables measuring the number of outside groups, both from the regulated interests and others, which testified for or against the regulatory agency in the Appropriations hearings, and the strength of their support. The other factor derived, Qualitative Support, was not so clear-cut as the other two support indicators. This factor had high positive loadings on the growth of executive-level grades in the agencies and on Presidential expenditure growth. High negative loadings appeared for the percentage of supergrades in the agencies and for appropriations success. The positive loading of the rate of executive-level grade growth and a corresponding negative loading of the percentage of supergrades of the total number of personnel is probably an artifact of the conditions prevailing in the earlier part of this century. Until the late 1940's, the percentage of executive-level grade relative to the total number of personnel in the agencies was low. It has only been in the last 30 years or so
Table 5-1
FACTOR LOADINGS FOR POLITICAL SUPPORT

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Diffuse Support</th>
<th>Qualitative Support</th>
<th>Specific Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Annual Growth in Number of Supergrades in Agency*</td>
<td>.197</td>
<td>.519</td>
<td>-.138</td>
</tr>
<tr>
<td>Percentage Annual Growth of Supergrades Relative to All Grades in Agency</td>
<td>-.316</td>
<td>-.311</td>
<td>.345</td>
</tr>
<tr>
<td>Percentage Annual Growth of Congressional Appropriations for Agency</td>
<td>.883</td>
<td>.100</td>
<td>.194</td>
</tr>
<tr>
<td>Percentage Annual Growth of Presidential Expenditures for Agency</td>
<td>.407</td>
<td>.787</td>
<td>.178</td>
</tr>
<tr>
<td>Percentage Annual Growth of Appropriations Success of Agency</td>
<td>.655</td>
<td>-.607</td>
<td>-.023</td>
</tr>
<tr>
<td>Number of Interest Groups Testifying For or Against Agency in Congressional Hearings</td>
<td>-.044</td>
<td>-.122</td>
<td>.536</td>
</tr>
<tr>
<td>Average Support of Interest Groups Testifying for or Against Agency in Congressional Hearings</td>
<td>-.081</td>
<td>.091</td>
<td>.756</td>
</tr>
</tbody>
</table>

*"Supergrades" are defined as GS-14 and above.
that the number of supergrades has expanded rapidly relative to agency personnel growth. Consequently, the factor analysis, which does not take this trend into consideration, shows that the percentage of supergrades variables loads negatively while the overall grade growth variable loads positively, even though the two are quite closely related, or have been in recent years. In short, the effect of the differing structure of federal executive level grades prior to the 1940's is distorting the overall picture. These reasons would seem to explain some of the anamolies in the Qualitative Support factor. Since the factor shows high loadings on Presidential expenditure growth and grade growth (.78 and .51 respectively), the factor does seem to represent another aspect of diffuse support as it is reflected in grade creep in the agencies.

A similar situation developed with respect to the factors developed as indicators of agency rigidity. Here again, as in the derivation of the support factors, appeared two relatively unambiguous factors and one that was somewhat less clear. The first factor, which can be called "Professionalization," showed high loadings for the percentage of experts in the agency and for the percentage recruited from inside the agency. These figures are shown in Table 5-2. Efficiency was also shown to load highly on the professionalization factor. Such a loading indicates that the agency operates more efficiently as its expertise increases. Equally satisfying is the observation that the percentage of lawyers in the agency does not load highly on this factor. This agrees with our earlier contention that as more lawyers are recruited efficiency declines, apparently because of the judicialization of agency procedures.
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Factor Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Members of Agency Elite</td>
<td>Professionalization</td>
</tr>
<tr>
<td>Classified as &quot;Experts&quot;</td>
<td>.807</td>
</tr>
<tr>
<td>Percentage of Members of Agency Elite</td>
<td>-.059</td>
</tr>
<tr>
<td>Classified as &quot;Lawyers&quot;</td>
<td></td>
</tr>
<tr>
<td>Percentage of Members of Agency Elite</td>
<td>.758</td>
</tr>
<tr>
<td>Classified as &quot;Insiders&quot;</td>
<td></td>
</tr>
<tr>
<td>Average Age of Members of Agency Elite</td>
<td>-.475</td>
</tr>
<tr>
<td>Percentage of Annual Turnover of Members of Agency Elite</td>
<td>.266</td>
</tr>
<tr>
<td>Percentage of Undisposed Cases in Agency per Annum -- &quot;Backlogs&quot;</td>
<td>-.408</td>
</tr>
<tr>
<td>Ratio of Number of Cases Disposed per Annum by Agency to Number of Personnel</td>
<td>.621</td>
</tr>
<tr>
<td>&quot;Efficiency&quot;</td>
<td></td>
</tr>
</tbody>
</table>
The second strong factor might be called the "Downs Factor" since this factor involves the heavy loading of increased turnover, movement of executives into or out of the agency (horizontal) or upwards in the agency's hierarchy (vertical). Increased turnover is one of the features of the rigidity cycle as expounded by Downs. Downs argues that as the agency begins to slow down in terms of growth and in the addition of new activities, personnel turnover will tend to increase. As the more active, career-oriented "climbers" leave the organization in search of opportunities in greener fields, the loss of these active personnel leaves control of the organization in the hands of "conservers," who are mainly interested in maintaining the established routines of the agency and aggrandizing their personnel security. This induces organizational rigidity. The further loading of increasing backlogs, reflecting the slowdown of the agency, suggests that this factor taps an important dimension of agency rigidity.

The final factor developed through the factor analysis is relatively ambiguous. The factor loadings seem to reflect rigidity associated with the increasing age of the agency executives, again indicating that the proportion of "conservers" is likely to increase among older executives. An increase in backlogs also loads fairly heavily on this factor, as do expertise and recruitment from inside the agency, to a lesser extent. The interpretability of this factor is rendered most difficult, however, by the high negative loading (−.79) of the variable measuring the percentage of lawyers recruited by the agencies. This is an anomaly which seemingly reverses the earlier expectation about the association of
the recruitment of lawyers with increased rigidity. One possible explanation for this apparent reversal is that there may be certain thresholds of agency activity or age whereby rigidity becomes an irreversible condition, regardless of the agency's recruiting patterns. That is, if an agency has emphasized the judicialization of procedures in its earlier years, the agency's behavior may become so biased in favor of the judicial, case-by-case approach that even a reduction in the hiring of lawyers will not produce significant change in the agency's approach to problems. In any event, the loading of the executive age and backlog variables merits the retention of this factor as a component of the overall analysis. For convenience, this factor will be called the Age and Lawyer Factor.

All of the factors derived from the factor analysis were employed as variables in the next analytic procedure, which is described below.

**Derivation of the Preliminary Path Coefficients**

The model to be tested in this paper was presented in Chapter III. It is reproduced in modified form in Figure 5-1.

The factors, $S_1$, $S_2$, and so on, making up the composite variables of "Political Support" and "Agency Rigidity" are indicated, as are the variables, $A_1$, $C_1$, and $C_2$, constituting "Agency Age" and "Agency Capture." It should be emphasized that when each of the composite variables are discussed as they appear in this model, what is actually referred to is a construct that is a linear combination of a series of variables. Obviously, each of the factors enumerated could be shown by further subdivisions as being made up of a number
FIGURE 5-1
THE AGENCY LIFE CYCLE MODEL

Where:

$A_1$ is Chronological Age
$C_1$ is Recruitment
$C_2$ is Post Career Service
$S_1$ is Diffuse Support
$S_2$ is Qualitative Support
$S_3$ is Specific Support
$R_1$ is Professionalization
$R_2$ is Downs Factor
$R_3$ is the Age and Lawyers Factor

of individual variables. However, these subdivisions will not be
directly referred to here except as they contribute to the factors
utilized in the analysis.

Having specified the model and its components, the next task
is to derive coefficients which describe the relationships between
the composite variables. From these coefficients, "causal" relationships can be inferred.\textsuperscript{6} Blalock suggests that where a researcher is interested in combining a simple inventory of causes with a simple inventory of effects, it is "possible to combine the indicators (both causes and effects) in relatively simple ways to obtain a single measure of the central variable. . . ."\textsuperscript{7} The appropriate technique to elicit this combination is canonical correlation.

Canonical correlation analysis takes as its basic input two sets of variables, each of which can be given theoretical meaning as a set. The basic strategy of canonical correlation analysis is to derive a linear combination from each of the sets of variables in such a way that the correlation between the two linear combinations may be maximized. Many such pairs of linear combinations may be derived. These canonical variates . . . are essentially equivalent to the principle components produced in principal components factor analysis. . . . Whereas both techniques produce linear combinations of the original variables, canonical correlation analysis does so not with the object of accounting for as much variance as possible within one set of variables but with the aim of accounting for a maximum amount of the relationship between two sets of variables.\textsuperscript{8}

By using the factors derived in the factor analysis as variables, canonical correlation produces coefficients that can be assigned to the paths in the model. Canonical correlation identifies the linear combinations of independent variables and the linear combinations of dependent variables that have the highest correlation with one another.\textsuperscript{9} Canonical correlation is a generalized regression analysis, employing more than one dependent variable. The coefficients produced can be interpreted as regression coefficients, and are subject to the same restrictions.\textsuperscript{10} While the usage of canonical correlation
as an analytic technique has been limited in the social sciences, it is appropriate for use in testing the life cycle model specified in this paper. Where the relationships in the model involved only single independent and dependent variable relationships, multiple regression was used to estimate the path coefficients. As noted, canonical correlation and multiple regression are analogous techniques, and the results are comparable.

**Derivation of the Final Path Coefficients**

A final analytic step was necessary before the final path coefficient could be assigned to the model. This step involved partitioning the variance in the coefficients to derive an estimated coefficient which would represent the relationship specified in the model. That is, the raw coefficients derived from the canonical correlation and regression analysis contained all the shared variance between the two variables. In order to determine which part of this variance actually was in the direction specified by the life cycle theory, it was necessary to separate that portion of the variance from the total variance. The separated portion of the variance is that which is reported as the path coefficient in this paper. In other words, the canonical correlation coefficients obtained show all of the variance shared by the variables without regard to the sign or direction of the relationship. The theory, however, specifies that the relationship must be in a specific direction, either positive or negative, but not both. The variance partitioning technique allows the separation of the shared variation on the basis of its positive or negative direction. Hence the variance which is in the "right"
direction—"right" according to the theory's predictions—can be assigned as the coefficient of any particular causal pathway in the model. For example, in the model involving all of the agencies, the raw canonical correlation coefficient between political support and agency capture was .38. By use of the variance partitioning procedure, the strength of that relationship in the direction predicted by the theory, that is positive, as political support is held to "cause" agency capture, was shown to be only .06, considerably weaker than the raw relationship would indicate.\textsuperscript{11} This procedure is possible in keeping with the theoretical framework, the model tested was assumed to be recursive, that is, there are "no feedback relationships or reciprocal causation between two or more variables."\textsuperscript{12} The recursivity of the model allows us to discard that portion of the variance which is counter to the direction predicted by the theory, and to focus on the strength of the relationships in the theoretically-predicted direction.

The completion of the three analytic steps described here allowed the assignment of path coefficients to models of the life cycle process for each individual agency, and for all of the agencies combined. These models, and the inferences made concerning them, are reported in the paragraphs that follow.

\textbf{A Model Representing All Agencies}

Figure 5-2 summarizes all of the relationships between the four variable clusters for all of the agencies as combined in a single model. The solid lines represent the predictions made on the basis of the explicit relationships discussed by Bernstein and Downs.
The broken lines represent possible other relationships within the four-variable structure. Several of the hypothesis presented in the third chapter focused on the relationships displayed in this model. Let us examine each of these with respect to the path coefficients derived.

FIGURE 5-2
COMBINED AGENCIES MODEL

AGE

SUPPORT

.14

.11

.06

.20

.10

CAPTURE

RIGIDITY

.31

Age and Support

The model specifies a causal path from the agencies' chronological ages to the quality of support available to the agency and from there to decay or rigidification of the agencies. Bernstein and Downs agree that the composition and nature of political support for the agency change with time, leading to the agency's capture and rigidification. In the model presented here, the association between support and age should decrease with time. There is a moderate relationship here in the expected direction (remembering that
the coefficient on the path expresses the portion of the variance in the direction posited by the theory). Age seems to have some relationship to declining support. However, it must be noted that the support variable is heavily loaded by Congressional budgetary behavior. Such behavior itself has a strong internal structure which is closely related to the norms of the Appropriations committees as well as to rational assessments by committee members of agency performance. Agency performance does have significant bearing on budgetary decision-making, but the direct relationship between age and declining support, as set out by Bernstein and Downs, is not as direct as it appears. Considerations other than those involving assessments of agency performance affect the budgetary decisions made concerning the regulatory agencies. The fact that the agency is getting older does not necessarily mean that support will decline, in fact, it may increase, depending on whether the support is from the agency's clientele, or is diffuse or qualitative support. The point is that support may vary largely independently from age. This indicates that the causal force of the agency's chronological age is not very strong, as we might expect from the results reported in the preceding chapter.

Support and Capture

The relationship between agency support and agency capture, crucial to the conceptualization of the model, is the weakest relationship displayed in Figure 5-2. The coefficient here is only .06. Across all of the agencies, declining support does have some relationship with the capture of the regulatory agencies by the regulated interests, but this relationship is extremely weak,
according to the model. We will see presently that this relationship is considerably stronger if the agencies are considered separately, but the low relationship in this particular model demands at least some explanation in its own right, as the impact of a major theoretical variable is thrown into question.

Two arguments, one substantive, the other methodological, can be made to explain why the theory was incorrect in predicting a strong relationship between support and capture. The substantive explanation is that the measurements of agency capture used here do not tap the most important dimension of capture, the nature and quality of agency policy outputs. The dimensions our measures do tap, elite movement between the regulatory agencies and regulated industries, may simply not be the whole story of agency captivity, in spite of the fact that it is often argued to be a major indicator of agency surrender to the regulated interests, as we noted in the previous chapter. Consequently, the failure of the data to conform to theoretical predictions may lie in the incomplete formulation of agency capture, a problem we have alluded to at several points in this paper. Actually, there is not compelling reason why political support of the agency should be directly related to the movements of elites back and forth between the public and private sectors. These phenomena may well be independent of one another, having more to do with personal decisions made by individuals than with agency decisions which are made and implemented by groups. Agency policy decisions may be more directly related to the need for support by the agency than are
the personal decision made by agency elites to move in or out of the agency. These considerations imply that the agencies regulate for the benefit of the regulated to offset declining diffuse support (and insure sufficient resources for their operations), but not necessarily because agency elites desire to insure themselves future jobs in the regulated industry. This distinction may seem unimportant, but it is actually quite crucial. It moves the explanation of regulatory behavior from a search for job and status-seeking commissioners and bureaucrats to an assessment of the organizational imperatives of adaptation to its external environment. In short, analysis can focus an organizational rather than individual needs.

The methodological explanation involves the tendency of several strong relationships to yield a weak overall relationship when the relationships are correlated with one another. This is because the strong relationships, each of which has a different slope, tend to cancel one another out, yielding bland coefficients. In the present case, the strong coefficients are the path coefficients for each individual agency model (see Table 5-3). Which of these two explanations is correct is not entirely clear, primarily because in considering the impact of support on capture, we are dealing with complexities which are exceedingly simplified by the data. Theoretical confusion also abounds in this area, as some analysts, such as Bernstein, have not been able to clearly separate needs of individuals within agencies from the needs of the agencies themselves. The result has been persistent attempts to link agency behavior (policy outputs) with the relationships of agency elites to the regulated interests. As noted previously, these postulated linkages motivate
studies such as the one by Graham and Kramer. The point here is that such conceptualizations are entirely too simplistic as explanations of why the regulatory agencies act to benefit primarily the regulated interests. There is something more going on in the agencies, and that something more appears to have its source in the behavior of regulatory agencies as large organizations, as distinct from being merely collections of large numbers of individuals. Downs clearly grasped this distinction, but Bernstein appears to have done so only to a much lesser degree.

Capture and Rigidity

The strongest pattern that emerges from the combined model is the relationship of .31 between agency capture and agency rigidity. This result is not unexpected. In his original work, Bernstein did not distinguish very clearly between captivity and rigidity. In his model, they appear as somewhat different aspects of the same phenomena. In this paper, the intention was to separate these two phenomena, and clearly this has been achieved to a significant degree. However, a close relationship is evident between capture and rigidity. Clearly the status of an agency with regard to elite recruitment is associated with the capability of the agency to react swiftly, flexibly, and innovatively to new tasks or to environmental changes. Agency rigidity is real, and the data indicate that in the case of the regulatory agencies, it is associated with the patterns of agency elite movement to and from the regulated interests. But, one must note that one of the components making up the composite rigidity variable has a strong influence on the relationship between agency capture and agency rigidity.
This is the high percentage of lawyers recruited into the agencies. In line with Mosher's contention concerning the closure of responsible positions in certain policy areas to the recruitment of only those elites who bear the "proper" credentials, the attitudes and behavior of lawyers may be the source of the greatest portion of the association of capture with rigidity. The high percentage of lawyers, many having previous experience in the regulated industries, or moving to the regulated industries after they finish their term of public service, must be viewed as having a substantial effect on agency rigidity patterns. In a few words, the number of lawyers among agency elites, and the nature of the career patterns of these lawyers is simply too large to safely ignore in drawing inferences from the data.

Other Relationships

Having assessed the relationships explicitly specified in the original theory, consideration can now be given to the implicit relationships (the broken lines) between the variables. Of these, the strongest (and the second strongest relationship in the entire model) is that between the age of the agency and agency rigidity. We hypothesized that agency rigidity increases with age. The figures in Figure 5-2 seem to indicate that this is indeed the case. Age, on the other hand, has a much weaker relationship with agency capture. This can be taken as further evidence of the distinction between rigidity and capture. Age has a clearly defineable, different relationship with each of these two variables. Consequently, we can assume that there are indeed real differences between capture and rigidity, that they are not the same phenomenon. This result also tends to
support Downs over Bernstein. Downs does not argue that agencies must be captured by their clienteles before they begin to display rigidifying tendencies. In Downs' view, aging can lead to rigidity without having to pass through the intervening step of agency capture. Downs does share with Bernstein the belief that a deline in diffuse support is necessary for rigidity to take place. But the relationships in this case is quite low. Support does have an impact on agency rigidity, but less than that of simple age alone, and considerably less than the impact of capture on rigidity.

If we look at only the three strongest relationships in the combined model, it is evident that agency rigidity is a function of captivity and aging. Aging is also moderately related to support, but support itself is only weakly related to either capture or rigidity. Based on the evidence of this model alone, we would conclude that support is not the crucial variable in the chain of relationships, as it is alleged to be both Bernstein and Downs. However, as noted earlier, this single model can be misleading. Before any final conclusions are drawn, the relationships between the relevant variables in individual agency models must be given consideration. Bernstein states that the agency life cycle takes place at varying rates within different agencies, but this variability is suppressed in the combined model. For that reason, five additional models, one for each agency for which the data was sufficient to make reliable calculations, were developed. The path coefficients for each of these models are presented in tabular form in Table 5-3.
TABLE 5-3
PATH COEFFICIENTS OF INDIVIDUAL AGENCY MODELS

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>CAB</th>
<th>FAA</th>
<th>FCC</th>
<th>FTC</th>
<th>NLRB</th>
<th>Dependent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.02</td>
<td>.00</td>
<td>.12</td>
<td>.53</td>
<td>.43</td>
<td>Support</td>
</tr>
<tr>
<td>Age</td>
<td>.00</td>
<td>.17</td>
<td>.35</td>
<td>.26</td>
<td>.00</td>
<td>Capture</td>
</tr>
<tr>
<td>Age</td>
<td>.22</td>
<td>.21</td>
<td>.32</td>
<td>.21</td>
<td>.24</td>
<td>Rigidity</td>
</tr>
<tr>
<td>Support</td>
<td>.31</td>
<td>.83</td>
<td>.17</td>
<td>.57</td>
<td>.22</td>
<td>Capture</td>
</tr>
<tr>
<td>Support</td>
<td>.54</td>
<td>.41</td>
<td>.20</td>
<td>.27</td>
<td>.19</td>
<td>Rigidity</td>
</tr>
<tr>
<td>Capture</td>
<td>.28</td>
<td>.52</td>
<td>.11</td>
<td>.21</td>
<td>.68</td>
<td>Rigidity</td>
</tr>
</tbody>
</table>

Analysis of Individual Agency Models

The most striking feature of the individual agency models is the great variation in the path coefficients from agency to agency. This variation reinforces the argument that what the agencies have most in common is their differences. The strongest relationships are between support and capture and support and rigidity, the reverse of what was seen in the combined model. The individual variations are quite high, but the inference is that agencies do show an individual tendency to have higher rates of elite movements in and out of the regulated industries as diffuse support declines. Correspondingly, they show a tendency to increase their rigidity at the same time. Such results conform rather nicely to theoretical pre-
dictions. Agency capture can also be seen as being related to rigidity, although more strongly in some cases than in others. The NLRB, interestingly, has the highest score in this regard. This is contrary to initial expectations because the NLRB, of all the agencies in the analysis, has built into its adversary proceedings active competition between labor and management. Based on Sálamon and Wamsley's conclusions, therefore, we would think that this competition between the elements of the agency's clientele would produce a reduced tendency toward capture and rigidity. This apparently is not the case. The NLRB, however, recruits many lawyers who have had extensive experience in the field of labor law to man the top positions in the agency. As noted previously, the capture variable is strongly influenced by agency recruitment patterns, as well as the movement of elites out of the agencies into the private sector. Since most of this movement in the NLRB is actually the movement of lawyers, and since the recruitment and retirement of lawyers and agency rigidity tends to rise together, the competitiveness factor washes out in the NLRB. The agency recruits enough lawyers from the regulated industry, or provides enough lawyers to that industry to overcome the supposed beneficial effects of built-in competition.

On the whole, the individual agency models show a conformance to theoretical predictions, although the strengths of the relationships exhibit considerable variation from agency to agency.

The effects of age as demonstrated by the individual models is another matter. The only consistent, uniform relationship across
all the models is between age and rigidity. The coefficients here
are virtually the same for all five agencies. The relationship of
age with capture and support is much more erratic. The weakest set
of relationships across all agencies and all variables is that
between age and capture. Age and support fare somewhat better,
although not by much. The obvious conclusion from these results
is that age is not a very powerful predictor in the single agency
model. Although age is uniformly related to rigidity, this condition
results not from agency age being a causal factor as such but rather
simply the framework within which other specific environmental and
organizational changes take place.

The most important relationships seen in the individual agency
figures are those taking place between the agency and its external
environment, specifically the effects of declining political support.
Loss of support does seem to induce both captivity and rigidity.
Bernstein and Downs were correct in crediting political support with
having important effects on agency performance. Bernstein saw such
an effect taking place through the intervening step of agency capture,
which is a correct surmise. Support, however, also functions directly
to create agency rigidity, as Downs saw. Bernstein dealt only with
the regulatory commissions so it is natural that he thought primarily
in terms of agency commissioner attitudes and preferences and personal
relationships as being the agents of agency capture, hence agency
rigidity (which is approximately the same thing to Bernstein). Downs
worked outside of the regulatory commission framework and therefore
was able to consider that lack of support for the agency might work
directly on the insecurities and ambitions of agency bureaucrats who
would respond to threatening circumstances in such manners as would tend to produce agency rigidity. The crucial difference is that in Downs' model, the agency bureaucrats would not have to be partial or sympathetic to the regulated industries because of past or hoped-for future employment, but because such partiality would produce support for their agencies. Agency security then becomes equated with personal security. In this process, as it is described by Downs, individual needs become subordinate to organizational needs. Or, if one is convinced that organizational behavior must always be reduced to the behavior or individuals, an alternate way of stating the primacy of organizational needs is to say that the individual comes to view his own needs as commensurate with organizational needs. In whichever way explained, the net effect is the same, the individual seeks to protect himself by protecting his organization.

These points can be summarized by stating that rigidity in regulatory agencies can be produced by a decline in the diffuse support available to the agency, without the intervening process of agency capture. But, where capture does take place, it supports any tendency toward rigidity. We can conclude that regulatory agencies face a situation of double jeopardy with regard to escape from the rigidity cycle. This in turn suggests that changes in the career patterns of agency elites are not going to solve the problems associated with organizational rigidity in the regulatory agencies.

Conclusions Derived From All of the Models

The alert reader has probably noticed that the results of the single model (all agencies combined) and the separate individual
agency models are contradictory in some respects. Both analyses indicate that capture is important in creating agency rigidity, and that age should not be viewed as a causal variable in the strictest sense. The role of political support, however, is much more important in the individual agency models than it appears to be in the combined model. The major reason for these results is probably methodological. Robust relationships are weakened when a number of them are combined, as was done in the model with coefficients from all of the agencies. For this reason, the approach considered here to be the most fruitful and meaningful is the consideration of the relationships within the individual agencies, while relying on the combined data for support.

The analysis to this point has indicated that the life cycle model has some degree of utility for predictions concerning regulatory agency behavior if it is augmented by statements concerning organizational behavior. The usefulness of age as a predictor variable has been brought into question, but political support has emerged with considerable empirical weight as well as theoretical relevance. Considering that political support is used by Downs as the main predictor variable in his theory of bureaucracy, a theory developed largely from the literature of economics and organizational behavior, the life cycle of the regulatory agencies is most satisfactorily explained by an organization model which places primary emphasis on the relationship of an organization to its external environment. Bernstein was apparently confused by the idea of time as a determinant rather than as a correlate of agency rigidity in his original model. This confusion is understandable, especially when it is realized
that when Bernstein wrote the organizational literature was nowhere nearly as well-developed or extensive as it has since become. Remarkably, Bernstein, without using an interpretative framework which could properly be called organizational, was able to develop from observations of the behavior of the regulatory commissions some essential components of organization theory which have today become commonplace, but which were by no means so in 1955. What we must wonder at is not that Bernstein made some erroneous inferences, but that he made so many correct ones. Bernstein's life cycle theory, for all of its weaknesses, must stand as a significant achievement in public administration and political science.
FOOTNOTES


4 As Gurr notes, "There is no single factor 'solution' to be found for a given set of data: different solutions are tried using different rotations. Those which make the most theoretical sense, or which satisfy some a priori technical criteria, are used." Gurr, *Politimetrics*, p. 156.

5 Factor analysis is inappropriate when used with sets of two variables or less. In such cases, the factor produced will simply be the mean of the variables.

6 Causal relationships can be inferred because of the structure of the model itself. That is, causality is not innate in the model, but must be imputed from the assumptions used to build the model.


9 Gurr, *Politimetrics*, p. 159.


11 An example will clarify this procedure. The canonical variates between rigidity and support were .46, .73, and -.51 for the rigidity factors and -.37, .08, and .94 for the support factors. These figures indicate the direction of the relationship and the portion of variance explained. To partition the variance, the signs were disregarded and the rigidity and support factors were added separately to yield two totals, 1.70 and 1.39, respectively. In order to find the percentage of the whole total that each variate contributed, each variate was divided by 1.70 on the rigidity side and 1.39 on the support side. This operation yielded the following percentages:
<table>
<thead>
<tr>
<th>Rigidity</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>.27</td>
<td>-.27</td>
</tr>
<tr>
<td>.43</td>
<td>.06</td>
</tr>
<tr>
<td>-.30</td>
<td>.68</td>
</tr>
</tbody>
</table>

Since the model predicts that there will be a negative relationship between support and rigidity, those variates having a negative sign are employed in the final calculation, in line with the objective of isolating from the total variance only the variance shared in the theoretically-predicted direction. These figures are -.30 and -.27. Each of these figures is multiplied by the remaining positive percentage of the opposite group of variates, i.e., -.30 is multiplied by .73 for a total of .219 (a percentage). The corresponding calculation for the support side is -.27 times .70, which is .189 (again, as a percentage). The signs are disregarded in this part of the operation. The totals thus obtained are added to produce an overall sum of .408, a figure which represents the total percentage of variance in the theoretically-predicted direction. In this particular case, 59.2 per cent of the explained variation is in an incorrect direction. The variance figure for the correct direction is next multiplied by the canonical correlation coefficient obtained when all the support and rigidity factors were correlated. In this case, that coefficient was .24. Multiplied by .408, the resulting value is .0979 or .10, the path coefficient assigned in the final model. This operation was performed on all variable clusters to yield the path coefficients cited in the models.

12Blalock, Theory Construction, p. 48. Neither Burnstein nor Downs specifically indicate feedback (non-recursive) relationships in their models. Considering that these are life cycle models, such an omission is not surprising, as such models are predicated on a straight linear progression from birth to death or decay. Such models overlook the ability of organizations to adapt to and/or change their environment through learning and feedback. Thus, the models posited by Bernstein and Downs are quite oversimplified. However, in the early stages of model-building and testing, which we are certainly in with regard to regulatory behavior, such simplicity must be expected. Blalock's comments are appropriate to this point: "[R]ecursive systems might seem overly simplistic from the standpoint of building adequate theoretical models of complex reality. I am convinced, however, that most of the analysis procedures currently used in sociology and political science are based on such models, though this is not often explicitly realized. . . . Furthermore, in the absence of accurate measurements and carefully formulated theories, recursive models would seem to give useful first approximations to more adequate theories." Blalock, Theory Construction, pp. 49, 50. Blalock's statement is a succinct argument and rationale for the approach taken in this paper, which is primarily exploratory.
CHAPTER VI

THE LIFE CYCLE AND REGULATORY POLICY

A Summary and Re-examination of the Hypotheses

Government regulation of the private sector has long been a source of considerable controversy in American politics. The problems of regulation have concerned not only businessmen, consumers, and politicians, but economists and political scientists as well. The growth of the consumer movement as a force in national politics has added new impetus to demands that "something" be done about regulation. Deciding what to do about regulation is not easy, however, either in terms of the conceptual issues involved or in terms of prescriptions for change. Although economists have devoted considerable attention to analyzing regulation and suggesting reforms, such guidance has often failed to be cognizant of the political problems of reforming regulation. Political scientists have not been as persistently attentive to the problems of regulation, with some notable exceptions, but where political scientists have considered the issues involved, they have agreed with the economists on one fundamental point. This point is that one of the fundamental problems of regulation lies in the relationship of public and private power—to whom does the government respond, and how are the benefits of government activity distributed on the basis of that response?

In the regulatory context, the problem of public vs. private power may be seen as one of designating the beneficiaries of regulation. That is, who is regulation intended to benefit, and who does it benefit? Are the powers of the state applied to benefit select groups (the re-
gulated interests) by protecting them from the rigors of competition, or are such powers exercised to maintain conditions as similar as possible to those of the free market and thus benefit a larger public, specifically, consumers? While the question of who actually benefits from regulation is not fully settled, the dominant perspective holds that regulation has been for the benefit of the regulated, not for the consuming public. Critics who perceive this as a distortion of public policy goals attribute this outcome to the domination of the regulatory agencies by the regulated interests. In short, the "capture" thesis of regulatory behavior has tended to dominate the analysis of regulatory behavior, especially among political scientists. In the "capture" thesis, regulatory agencies are perceived as systematically favoring the regulated industries and systematically ignoring a larger "public interest." Public agencies are seen as tools for the advancement of benefits for private groups. The capture thesis reached its most characteristic expression in Bernstein's *Regulating Business by Independent Commission*, published in 1955. Since then, the idea of regulatory agency "capture" has become conventional wisdom, and has done so without any serious empirical examination. This paper has attempted in part to remedy that omission. We have demonstrated that Bernstein's theory, with some additional arguments drawn largely from the rigidity cycle model of Anthony Downs, is empirically testable, and have tested that theory with a limited data set. This approach was taken because simplistic solutions to regulatory problems, such as calls for the abolition of the regulatory agencies, are neither feasible nor perhaps desirable. If regulation entails some deleterious second-order consequences, or is not effectively performing its
assigned tasks, then the first step in reform is not the abolition of the regulatory agencies, but an examination of the reasons for failure, beginning with a widely accepted explanation of the causes of such failures.

A number of hypotheses derived from the rigidity cycle model were presented in Chapter 3. Mention was made there that the intention of this study was not to test fully all of these hypotheses, due to limitations in the data and in the time available to complete this study. Several of these hypotheses have, however, been directly addressed in the course of the analysis in this paper. Additionally, some inferences can be drawn from that analysis regarding those hypotheses not subjected to formal testing. Such inferences are naturally limited, but are of some interest. A summary of the research findings and inferences concerning the relevant hypotheses is given below.

H1: The greater the age of the regulatory agency, the greater the rigidity of the agency.

H2: The greater the age of the regulatory agency, the more likely is the agency to become captured.

Organizational age is not strongly associated with either agency rigidity or agency capture. Age does not function as a predictor variable to any significant extent. Logically, this makes sense. Age, in and of itself, can never be considered a cause of anything. Age is simply a demarcation, a measure through which, by convention, events can be sorted out or certain occurrences noted. Processes can take place within time (as all known processes do), but time itself is not a process. Age itself is only a measure of time, or at best, a process
that takes place in a chronological framework, but which itself is only a function of other processes. If anything, we should not think in terms of age producing rigidity, for example, but rather rigidity (the underlying process) producing over time the condition called age. In philosophical terms, then, Bernstein placed age at the "wrong end" of the life cycle model, it should be a product of the processes of capture and rigidity, rather than a causal antecedent of those processes. In any event, age should be eliminated from the strictly causal structure of the model.

H3: The capture of the regulatory agency is positively related to the rigidity of the agency.

Capture and rigidity can be thought of as two analytically separable concepts. Capture, as it is conceptualized here, is a function of the movement of elites from the regulated sectors to the regulatory agencies and out again to the regulated sectors. The question of whether or not the potential rewards inherent in these movements bias the perceptions of regulators was not fully answered here, and is perhaps not fully answerable to any outside observer. We argued, however, that the prospects of holding employment with the regulated industry after a period of service with the regulatory agencies was probably a greater threat to the "objectiveness" of regulators than was recruitment from the regulated industries. Even if such biases do exist, however, there is not particular reason to think that it would predict strongly to agency rigidity as it is defined here. The indicators of capture we used do not directly measure the "bias quotient" of regulators. It is risky to assume, moreover, that pre- or post-regulatory service with the regulated
industries necessarilty precludes the mormation of "public-regarding" attitudes and performance in elites. We do not want to make the assumption, nor foster it further in this paper. Our capture indicators do indicate in two agencies fairly strong relationships between capture and rigidity and more moderate relationships in three others. But, rigidity in this analysis is concerned primarily with certain internal states of the regulatory agency, rather than the quality of the decisions produced by the agency with respect to the benefits offered to the regulated industry. This is the point where the model used suffers most—in our inability to link agency capture with the policy outputs of the agencies. One can assume that they are related, but it is impossible from the data available for this paper to be specific about how this linkage operates. The data available has shown that elements of capture and rigidity are linked in the regulatory agencies. Capture, however, in and of itself, seems to be no guarantor of inevitable agency rigidity.

H4: The greater the diffuse political support afforded a regulatory agency, the less the rigidity of the agency.

H5: The greater the specific support of a regulatory agency, the greater the rigidity of the agency.

Political support, as we discovered in the previous chapter, is the strongest predictive element in the model of the rigidity cycle. Not only does the presence of strong political support substantially offset agency capture in five agencies, and thus indirectly influence agency rigidity, political support also operates independently and directly on agency rigidity in those agencies. Agency rigidity, therefore, may take place as a direct function of the quality and quantity
of political support, with or without the intervening process of capture. This is contrary to the predictions of the life cycle theory posited by Bernstein and Downs.

The data used for the empirical tests of the life cycle model focused primarily on what was called diffuse support—measures of Presidential and Congressional support for the regulatory agencies. Ideally, we would have had equally good measures for specific or clientele support. Unfortunately, no good indicators of clientele demands on governmental regulatory agencies could be found for this paper. Consequently, we cannot say to what extent regulatory agencies meet clientele demands, and how such treatment is reflected in the overall distribution of agency policy outputs. Some positive indicators of agency support by specific clienteles were sought through the use of Appropriations subcommittee hearings. The rationale for pursuing this strategy was the assumption that clients who were interested in maintaining their good relationships with the agencies would show up at these hearings and praise and promote the agencies before the committee members. Or, if the clientele groups were dissatisfied, they would come before the committees to complain. What was actually found in going through thousands of pages of subcommittee testimony back to the year 1923 was that the appearance of clientele groups before the subcommittees was a relatively rare occurrence, especially with respect to the regulatory agencies. In cases where clientele groups did appear, the testimony tended to be mixed, both pro and con toward the agencies. Often the testimony took the form of prepared statements by such groups as the U.S. Chamber of Commerce or the AFL-CIO, urging either more or less re-
gulation overall, or in particular areas. Often testimony also
took the form of appearances by Congressmen or ad hoc groups to
ask for the continuance or (usually) increased funding for a parti-
cular agency program or programs. The overall economics or
philosophy of regulation was rarely brought up by witnesses.

Obviously, Appropriations subcommittees are not the forum
chosen by agency supporters to lobby for "their" agencies. The
mass of information that must be processed by the subcommittees
and the limited amount of time for hearings undoubtedly works to
discourage these hearings from becoming the springboard for debates
on regulation. The committees and subcommittees concerned with
substantive legislation, or with governmental organization, may be
more profitable arenas in which to find the supporters of the
regulatory agencies having their day in court. In any event,
specific support did not turn out to be one of the stronger variables
included in the analysis. Emphasis was placed, therefore, on the
effects of diffuse support.

We found that the phenomenon of diffuse support is somewhat
more complicated than the initial model indicated. The President and
Congress seem to act somewhat independently of one another in their
reactions to the activity of the regulatory agencies. There are con-
siderations other than those mentioned by Bernstein--loss of interest
in regulation and the increasing inefficiency of the regulatory
agencies--which help to determine the response of the President and
Congress to the agencies. The important point here is that political
support, even in the limited form and context measured here, does
have considerable effect in the growth of agency rigidity. These
effects are variable across agencies, but they are appreciable, nevertheless. Noting the significance of these effects brings us around again to one of the major themes developed in this paper, the effects of the external environment on the behavior of the agency. We will return again to this theme later in this chapter.

H6: The stronger and more competitive the clientele groups surrounding a regulatory agency, the less the rigidity of the agency.

As mentioned earlier, we could not get usable measures of group competitiveness. In the case of the NLRB, an agency with "built-in" competitiveness, the relationship between support and capture is only moderate, but the relationship between capture and rigidity is quite high. Competitiveness should be associated with increased support for the agency, which in turn should be associated with decreased capture and lessened rigidity. In the empirical model for the NLRB, however, capture and rigidity have a strong positive association, indicating that competitiveness does not guarantee less rigidity, although competitiveness does seem to help ameliorate the tendency of the agency to become captured. These results cannot be generalized to the other agency models, which do not have the "built-in" competitiveness of the NLRB. Consequently, we can say little else about the effects of competition here. Some future research does seem to be in order along these lines.

H7: The greater the size of a regulatory agency, the less the rigidity of the agency.

The size of the agency does seem to make some difference in its tendency to rigidify, and to become captured as well. The FAA, the largest agency among those studies, does show an especially high relationship between support and capture, and a fairly high one
between capture and rigidity. So, contrary to the hypothesis, the larger agency shows as high or a higher tendency toward rigidity. Con-
ventional wisdom, rather than Blau and Meyer, from whom this hypothesis was derived, seems to be more in line with the actual empirical results.

H8: The lesser the degree of cohesion among independent regulatory commission executives, the greater the rigidity of the agency.

We were unable to obtain or develop any measures of cohesion from the data available to us. Therefore, this hypothesis was not included in the analysis.

H9: The greater the age of the independent regulatory commission executives, the greater the rigidity of the agency.

This hypothesis was among those relating the characteristics of agency elites to some aspect of regulatory agency behavior. The data indicated that rigidity was moderately associated with increasing executive age. Rigidity, however, is more than simply a function of executive age, and with a lack of attitudinal data for executives of varying ages it is probably inadvisable to give too much weight to this variable as a determinant of agency rigidity.

H10: Regulatory agencies headed by a commission rather than by a single executive will tend toward greater rigidity.

No noticeable differences were detected in terms of tendencies toward rigidity in single and multi-headed agencies. Of course, in such a small group of agencies, absolute reliance cannot be placed on this conclusion. It is instructive, however, in the light of Bernstein and Sharkansky's remarks on this subject,\textsuperscript{2} to consider that the actual structure of the single-headed agency vs. the multi-
headed commission may not be as important in determining agency behavior as are some other elements which are common to both types of organizational structure, such as the environment in which the agency must operate.

H11: The greater the personnel turnover in an agency, the greater the rigidity of the agency.

The results of the analysis of elite turnover are ambiguous. Downs predicted that turnover would increase as the agency got older. The data for this paper produced correlation coefficients which are actually too small to be considered reliable. The coefficients, although low, did show that turnover increased slightly in some of the agencies over time, and decreased slightly in others. No clear pattern emerged in either direction. Turnover did load positively on one of the rigidity factors, so some relationship, albeit an imperfect one, exists between increasing turnover and rigidity in the direction predicted by Downs. This trend, while suggestive, is by no means definitive. The question should not be considered settled on the basis of the present data alone.

H12: The greater the research activities of a regulatory agency, the less the rigidity of the agency.

Research activities, as a budgetary line item, were shown in the Budget for only two agencies, the FCC and the FAA. Since the FAA shows a considerably stronger tendency toward capture and rigidity than does the FCC, it would appear that research activities alone do not present a formidable barrier to rigidifying tendencies. Again, though, the data obtained is less helpful than it ideally could be to definitely nail down this hypothesis. The
other agencies in the study may well have carried out research activities which are not specifically listed as such in the Budget. In such an eventuality, the effects of the quality and quantity of agency research would be largely hidden so far as this analysis is concerned. Thus, while we can say on the basis of the data we have that agencies cannot be differentiated on the basis of their research activities as they relate to the avoidance of rigidity, the case should by no means be considered closed.

H13: The lesser the quality of leadership in a regulatory agency, the greater the rigidity of the agency.

The problems of defining and identifying leadership were forgone in this paper. Leadership can be an important variable in the functioning of organizations, but in an analysis such as the one undertaken here, leadership must assume the role of a residual category, serving to explain those portions of the organization's behavior not tapped by other predictor variables. Our analysis does not indicate that some agency elite characteristics are important with respect to the appearance of capture and rigidity in the regulatory agencies. Leadership may also affect the quality of support available to the agencies, as, for example, dynamic leadership leading to improved budgetary performance for an agency in some years. Leadership may also be associated with a more aggressive attitude toward regulation.

We have not gone beyond the elite characteristics described in this research to build a leadership variable, but we suggest that future work in this area might be centered around efforts to integrate biographical studies of a comparatively small number of
agency elites, such as was done in the study by Graham and Kramer, with some measures of the policy performance of selected agencies. Prior efforts along this line have tended to be anecdotal and relatively unsystematic. Theoretical guidance would be of some importance in maximizing the benefits of any such study. Researchers should be more explicit in articulating the theoretical underpinnings of the assumption that it is a "good thing" to discover how leadership affects agency performance. In the life cycle theory, that assumption is part of a larger theoretical structure. In the past, unfortunately, the leadership element has been considered in isolation, a procedure which can produce misleading conclusions as to the source and nature of agency capture and rigidity. To the extent that this paper has dealt with the elite leadership element, it has tried to do so in the context of the theory as a whole.

**Organizational Age and Environment**

Based on the results of this analysis and the exploration of the hypotheses with which it was begun, the future does not look bright for an aging theory of regulatory agency decay. The reasons for caution concerning the use of age as a predictor variable have been stated. The question that remains is: Does the theory fall when the variable of age is eliminated? Do we need age as a variable to "save" the theory? Our answer is that we do not need such a variable and, in fact, the theory may be stronger without being bound by the constraints necessarily associated with the one-way flow of a chronological element. The removal of time as a "causal"
variable would introduce the possibility of exploring a non-recursive model. Such a model would allow for two-way interaction between the variables and for the possibility of introducing feedback loops. In such a model, agency rigidity, for example, instead of simply being the result of increasing agency capture and/or decreasing diffuse support, might itself be a partial cause of the loss of such support and the increase of tendencies toward capture. Similar relationships might be present among all the variables. A model of this nature is considerably more sophisticated, and probably more isomorphic with reality. Such a model was not tested in this paper because we were concerned with the life cycle model as it was developed in its original form. The logical next step for research would be the development and testing of a more sophisticated model, employing age as something other than one of the primary causal variables.

The most fundamental result of this research has been in reinforcing empirically the conceptual notion that the relationship of an organization to its external environment is extremely important in determining the behavior of that organization. In this paper, the major environmental condition probed was the quality of political support available to the regulatory agency. We do not pretend that this is the only environmental variable of importance. Another major factor, for example, might be the growth of technology in the regulated industries. The regulatory agency must always be in a position of trying to play catch-up with new regulatory demands created by changing technologies. But, not all factors could be considered. We chose to emphasize the role of political support as the chief environmental variable because the life cycle theory itself
emphasized the variable. And we have tried, whenever possible, to remain within that theoretical framework for the empirical portions of this paper. The whole question of organizational environment does deserve some further discussion, due to its importance not only to this particular theory, but to organizational theory in general.

Organizational environments have been classified into four "ideal types' according to the degree of system connectedness that exists among the components of the environment." Two of these environmental types seem especially relevant to the problems of the regulatory agencies. These are the "disturbed-reactive" environment and the "turbulent field" environment. The "disturbed-reactive" environment is characterized by the infringement of similar systems (e.g., other organizations) in a field. The "turbulent field" environment is one in which dynamic processes arise from the environmental field itself and not merely from the interactions of components within it. In this type of environment, change outstrips the ability of an organization to keep up with it, and, indeed, the efforts of an organization to keep pace with change may have the effect of hastening even more change, in short, a vicious circle.

Clearly, both types of these environments would impose considerable flexibility as a requirement on an organization as an alternative to rapid extinction. The other two types of environment are largely unchanging and undemanding of rapid and flexible response. An additional problem for organizations is that environments can change over time. What was once a fairly placid environment may quite suddenly become a turbulent one, which in time may become relatively placid once more. Such conditions seem to be in phase with the actual performance
of the regulatory agencies. Goodsell's analysis of regulatory behavior is informative in this respect.\textsuperscript{5} Goodsell discovered a definite periodicity in regulatory behavior. Trend lines indicating the intensity of regulation over a period of years for several agencies have clearly discernible peaks and valleys. Goodsell argues that these trends are related to the state of the national economy in general and more specifically to the attitudes of the President in office.\textsuperscript{6} The data in this paper demonstrated a similar periodicity, indicating that there is an ebb and flow in the tides of agency affairs, changing demands and threats from outside the agencies but to which the agencies must respond.

We must conclude from these considerations that agency response to environmental change is the path to survival. But, if this statement is true, does it destroy the argument that agencies grow more rigid, that is, less responsive, with time? If the statement is true, then logically flexible, responsive agencies should survive, and rigid ones should vanish. Such logic flies in the face of experience. Some agencies do show clear rigidifying tendencies are still with us. How does one reconcile these anomalies?

The path out of this dilemma lies through the differentiation in environments discussed earlier. To some extent, each agency's environment is unique, and the individual agency's response to its environment is also unique. But, such individual responses can be classified into broad categories of response. Kaufman has provided such a classification in his empirical study of organizational aging.
Suppose some organizations are in the classical mold and stiffen as they grow older, in a dynamic environment, they would die off as their capacity to adapt declined. ... Supposed also that some rigid from the moment of establishment; they would not last long. ... And suppose finally that some are flexible from the start or grow flexible over the years; they would survive for a long time in a continuously changing setting. The system would "select out" all but the most flexible, and old age would indicate great adaptability, not great rigidity.

All these hypotheses about organizations and their environment fit together because each focuses on a part of the organizational world. As a general rule, the constantly changing environment may screen out all but the most flexible organizations. At the same time, a few rigid ones may fall into stable environmental "niches," where they could endure for long periods despite their limitations. As a result, the oldest group would comprise both very flexible and very rigid organizations. ... From time to time, a shift impinging on a niche or an accumulation or rigid tendencies would cause the death of an organization even in the oldest group; no organization would be immune. On balance, then, the prospects for those that are fortunate enough to persist for long periods would be bright, unlike the prospects for old organisms.

Applied to the regulatory agencies, Kaufman's classification would indicate that the agencies can be expected to show varying responses to different environmental characteristics. Some would be rigid because their environment favored the development of such a condition at a given period of time. "Favoring" of such a condition by the environment means that the agency is not presented with new demands and significant challenges to its established patterns of response. Other agencies would remain fairly flexible throughout their life periods, as they have had to meet constantly shifting challenges and demands. Such conditions would in part account for the
varying rates of agency performance with regard to the appearance of rigidity in the agencies studied in this research.

This whole approach to some extent emphasizes the uniqueness of each regulatory agency with regard to its particular environment, and with regard to agency response to that environment. At the same time, generalizable patterns of response to similar conditions are in evidence. Thus, a place can be found for both the case-study and the aggregate data approach when organizational behavior is to be related to environmental conditions. Research should be encouraged on both of these fronts, as each has a unique contribution to bring to the study of regulation. To summarize: In general we find that agency-environmental interaction is more important in determining agency rigidity patterns than is the mere fact of agency age. Types of environment, and various agency responses to those environments can be classified and used as valuable research tools for the further understanding of regulatory phenomena.

Agency Capture and Public Power

We have noted at several points that for many observers the encroachment of private power into the public realm has been strongly identified in the regulatory arena with the movement patterns of elites between the public and private sectors. We showed that such movement is not an infallible indicator either or agency capture or rigidity. This was shown to be the case partially because the conceptualization of agency capture itself has been poor or confused. Such confusion has led to an oversimplification of the complexities involved in regulatory agency capture. Another reason, perhaps the
more important one, is that observers have not considered the possibility that the professional status of elites recruited into the regulatory agencies may have a greater effect on agency responsiveness than whether or not such elites have had, or plan to have, connections with the regulated interests. The major manifestation of this phenomena so far as this analysis is concerned is the preponderance of lawyers in regulatory agency service. The observation that the judicialization of agency procedures leads to capture and rigidity is not a new one, but the argument advanced here goes one step further. Our position here has been the preponderance of lawyers in the agencies causes the agencies to seek legalistic (generally procedural) solutions to regulatory problems almost exclusively. This reliance in turn creates the need for the services of more lawyers and legal competence as a prerequisite for service at the upper echelons of the regulatory agencies. The result has been, as the idea is borrowed from Mosher, an increasing "closure" of agency service to virtually all but lawyers, and to any problem-solving approaches but legalistic ones. Thus rule is by no means iron-clad, but the analysis is suggestive on this point, and it is one which would be well to bear in mind when the origins and consequences of agency capture and rigidity are considered.

The real encroachment of private power upon public power may thus lie in a direction which has not been given extensive attention. This encroachment may lie in the influence of career professionals who use the resources of public power to preserve, protect, and extend the prerogatives of their particular professions by preventing anyone who has not followed a career pattern specified by the professionals
themselves from entering the profession, or from service employing those professional skills. In such cases, the distribution of public benefits may not be made on the basis of public needs, but rather on the basis of private needs—the needs of elite professionals to protect their domains. This would include protection of agencies where those services were employed. Consequently, personal and agency goals would become highly identified with one another. This in itself would be a form of agency capture, with the attendant consequences for agency rigidity and public policy.

These conclusions can be taken as a call for an increased role for organization theory in the national debate over regulatory policy and regulatory reform. Insights into organizational politics, based on the development of organizational theories, may be the major contribution that political science can make in an area long dominated by economists. Political science must move away from a static, institutional approach in the consideration of regulatory as the discipline has done in comparative politics, political behavior, and other areas.

Some Policy Recommendations

The conclusions reached in this paper can serve as guides for policy recommendations concerning regulation. We assume that regulatory reform is the desired policy goal to be achieved, as opposed to simply maintaining the status quo in regulatory matters. The latter course, it is only fair to point out, is a viable policy alternative. Indeed, Herman argues that maintenance of the status quo is the most likely result of the current efforts at regulatory
policy reform. "[T]he probability that major changes in regulation will occur [is zero]." The tendency for one who has been immersed in the study of regulation for any period of time is to agree with Herman, assuming that the major systemic alternations necessary to offset a low probability of change in regulation do not themselves have a high probability of occurring. In spite of such pessimism, some recommendations can be made which might provide marginal improvements in the current situation.

Since environment has been shown to be so important to regulatory performance, we will take as a given that any regulatory reforms which have any possibility of success must be imposed on the regulatory agencies from outside. The agencies themselves should not be expected to make substantial progress toward reform without the spur of an outside impetus.

Past experience has demonstrated that procedural and structural reforms in the regulatory agencies will not achieve the goals of lessening the dependence of the regulated agencies on the regulated industries. Such dependence is the result of the agencies need for political support to assist in the marshalling of resources necessary for agency growth and survival. This support comes at a price, for the regulated interests gain the right through such support to be consulted and to interdict any action which might affect them adversely. Interdiction of this sort does not encourage the agencies to be particularly aggressive in imposing regulatory penalties on those interests operating in any agency's range of responsibilities. Meddling with agency procedures does not strike to the heart of the exigencies created by the agency's need for support.
Therefore, we suggest that Congress provide the regulatory agencies with incentives for more aggressive regulation, particularly in the form of increased budgetary and legislative support for an active program of regulation. More precise direction and specification of what the agency should consider as the "public interest" would also be beneficial. This approach would call for statutes which would spell out an agency's regulatory mission in some detail. If, after such measures were taken, some agencies still seemed inclined to rely on the regulated sector for primary guidance in carrying out regulation, Congress could act to create disincentives for such behavior. Some selective budget-cutting might be in order, for example. Initially, such an action might have the effect of driving the agency closer to the regulated industry, but in the long run the agency would be forced to respond to Congressional demands. Otherwise, without adequate budgetary support, the agency would face the danger of withering on the vine. This course would require Congress to resist the blandishment of the industry whose protection the erring agency had sought. If Congress would remain firm through such an assault, the agency would eventually be forced to capitulate and begin to maintain some distance from the views of the regulated industry.

The fragmented nature of decision-making in Congress makes the type of resistance mentioned above extremely difficult to maintain in the face of continued pressure, especially in the more obscure regulatory arenas where the only constituency is the regulated interest itself. An additional aspect of this problem is a tendency on the part
of Congress to regard many of the regulatory agencies, especially the regulatory commissions, as lying exclusively in Congress' own bailiwick. Efforts by the President to interfere with the agencies for the purpose of coordinating regulatory policy tends to be resented and resisted by Congress. The quasi-independence of the independent commissions tends to exacerbate this whole problem still further. The result is that there is simply no firm hand guiding regulatory bodies toward any coherent national goals. Of course, this problem is pervasive in the American political system as a whole. The problem, however, is particularly aggravating in the regulatory arena, where demands for reform have been consistently defeated by the fragmentation and diffusion of power to the extent that agencies for the most part have become answerable to only themselves in making regulatory policy. To help solve the problem of diffusion of power and the fragmentation of responsibility, the President should be responsible for establishing and coordinating regulatory policy at the national level. Coordination of a national policy might involve a certain amount of administrative and organizational reorganization, but reorganization should not be allowed to become an excuse for a lack of, or a substitute for, substantive activity.  

Efforts in either or both of the directions mentioned above could succeed in realigning the sources and nature of agency political support to at least a moderate extent. A realignment of this nature could further produce substantial effects if the regulatory agencies were provided with clear guidelines and a clear ranking of regulatory goals. The explicit statement of such goals would allow the development of measurable indicators of agency efficiency and effectiveness
in achieving those goals. This in itself could be another significant instrument of control. The Planning-Programming-Budgeting (PPB) effort in the federal government was a glimpse of how indicators, resources, and goals could be coordinated within and across agencies for planning and decision-making. Although PPB was a failure when applied to the activities of the whole U.S. government, more modest incremental efforts along the same lines could eventually become an important source of policy guidance and control for the regulatory agencies.

A Final Assessment

The simple clarification of regulatory goals would be a major step forward in reforming regulation. At present, regulatory reform means different things to different people.

One set of interests, generally represented by industry, means by "deregulation" the removal of governmental obstacles to profit making. . . . The other set of interests, generally represented by economists, means by "deregulation" the removal of governmental and other obstacles to price competition.

Perhaps the first major step forward is to decide in what balance we are to have each of these somewhat incompatible goals. Clearly, the crucial issue is who is make such a decision. If private power dominates the decision process, than the balance is likely to sway toward the maximization of profit (although not to the extremes of the latter part of the 19th Century). If public power is determinative, then we should expect to see a movement in the other direction, provided that public power is truly "public" and not simply the legitimation of private
power carrying out public functions for its own benefit. In the present and the immediately foreseeable state of things, the regulatory agencies are in no position to exercise true public power to make these crucial decision. The ultimate challenge and responsibility must lie, as is proper, with the President and Congress. These institutions, and the individuals occupying the roles in them, must be the ones to make the hard decisions and to stand by them in the face of extreme pressure. Such initiative and steadfastness is an indispensable ingredient for any successful regulatory reform now or in the future. The potential for reform is with us now, but, as in all human endeavors, the promise will remain unfulfilled until there is a will to achieve it.
FOOTNOTES

1 The exceptions among the political scientists are Lowi, McConnell, and Edelman, all cited in previous chapters.

2 See fn. 43, Chapter 1.


4 Ibid.


6 Ibid.

7 Kaufman, Are Government Organizations Immortal, p. 69.


10 Seidman has commented on the tendency of the federal government to reorganize in lieu of substantive activity. See Seidman, Politics, Polisation, and Powers, pp. 12, 13.

11 Herman, "Deregulation: Now or Never!" p. 224.


"Independents Critical of Natural Gas Decontrol." The Houston Post, 7 February 1976, p. 8E.


