空大行政學報 第十三期 民國 92 年 8 月 341-374 頁

Regulatory Decision Making: A Literature Review

I-Jan Yeh* Chyi-Lu Jang**

Abstract

This paper will review myriad of disciplines, which will contribute to our understanding of regulatory agencies' decision-making as they are. The literatures reviewed in this paper offers a general view on regulatory decision making with respect to corporate economic activities. This paper is divided into four parts. Section I explicates the theories that inform current practices of government intervention, which serve as the prelude to a public-perspective decision making on regulatory issues. Section II presents theories of decision making that pertain to bureaucratic organizational setting only. Section III delineates approaches to regulations across various disciplines as well as describes the contributions made by modern political economy to the study of regulation. Section IV lays out the critical elements that should be incorporated into the theoretical construct of decision-making of regulatory agency.

Key Words :Regulation, Regulatory Agency, Decision-Making,

---

* Ph. D. Candidate, University of Southern California.

** Assistant Professor, Department of Political Economy, National Sun Yat-Sen University.

（收稿：92 年 4 月 30 日） （修正：92 年 5 月 22 日） （接受：92 年 6 月 2 日）

Regulatory Decision Making: A Literature Review
2003(Aug), No. 13,341-374

管制機構的決策制定：文獻回顧與檢討

葉一璋[*]　　張其祿[**]

摘要

本文將針對當代主流的政府管制決策理論進行系統性的回顧與分析，以使吾人對於政府管制措施之制定與執行能有更深入的瞭解與認識。本文分爲四個主要部分：第一個部分將介紹政府干預私人社會與經濟活動的主要理論根據與爭議，以做爲吾人瞭解政府管制措施的基礎；第二個部分是在官僚組織的環境背景中來討論管制政策的形成與執行；第三個部份將深入探索與分析目前最爲重要的管制觀點與途徑，特別是當代政治經濟學者之看法與研究，而最後一個部分則將著眼於管制決策理論的未來發展與改進。

關鍵詞：管制、管制機構、決策制定

[*] 美國南加州大學公共行政學博士候選人，現任世新大學創新育成中心協同主持人與行政管理學系兼任講師。

[**]美國南加州大學公共行政學博士，現任國立中山大學政治經濟學系助理教授。

Regulatory Decision Making: A Literature Review

Introduction

Regulatory decision making, as the name implies, encompasses all the essences described in the studies of regulation as they are employed in the decision premises which have the characteristics of political institutions such as Congress, Bureaus, and Commissions. It is as simple as the hand signing the papers and yet as complex and subtle as various influences competing against each other for their own advantage under the constraints of our political institutions. Theoretically, it is a confluence between studies of regulation and studies of bureaucratic decision making. Yet, empirically, the process of interaction does not occur in vacuum, and exploring the vacuum or the "black box" would call for an agency-theoretic regulatory decision-making model that must account not only for the real differences between agencies, but also for the differences in the temporal political coalitions whose demands underlie the establishment of particular agencies.

Although it is widely accepted that the history and analysis of actual regulatory decision should be considered within the context of the political structure and economic conditions, e.g., the context of government-business relation, there exist no single theory of regulation that could inform separately for both the genesis and the operationality of regulatory agencies. As shown in many scholarly researches, a multi-theory construct of regulatory decision-making can be sketched so as to conform to the actual operation of regulatory agencies. To understand the how in reality regulatory decisions were to be made, we must first understand where agencies are situated. In its most reduced form, the contextual approximation of agency decision-making goes like this:

Historically, the mechanisms of government have been guided at lease in part by the rationality of political interest. Decisions make by the President and by Congress reflect not only the best thinking of man and women who serve the public good, but also the agendas of those who provide financial support to these elected officials, and the constituencies whom these elected officials represent. Such decisions shape the infrastructure of government, and provide general form to the programs that are maintained by federal agencies. Professional bureaucrats, operating within the structure provided by the President and Congress, make decisions based to some degree upon political interest as well - often seeking to ensure their survival by defending their organization against adversaries, and striving continuously to increase their span of administrative control...(Simeone, et. al., 1998)

This paper will review myriad of disciplines, which will contribute to our understanding of regulatory agencies' decision-making as they are. The literatures reviewed in this paper offers a general view on regulatory decision making with respect to corporate economic activities. This paper is divided into four parts. Section I explicates the theories that inform current practices of government intervention, which serve as the prelude to a public-perspective decision making on regulatory issues. Section II presents theories of decision making that pertain to bureaucratic organizational setting only. Section III delineates approaches to regulations across various disciplines as well as describes the contributions made by modern political economy to the study of regulation. Section IV lays out the critical elements that should be incorporated into the theoretical construct of decision-making of regulatory agency.

I. Government Intervention in the Economy

1.1 The Paradox of Regulating Modern Corporation

The divergence between theoretical prescriptions and empirical realities observed in modern regulation studies can be attributed to mainly a debilitating paradox at the heart of current economic policy geared toward the issue of "why regulate the modern corporation?" The growing importance of organizational coordination relative to market coordination in the value-creation process has given rise to an elaborate literature, new economics per se, dealing elaborately with the relation between markets and business organization in the capitalist economy. The ways the relation being approached in the literature have some significant bearings on economic regulation, and so lies the paradox observed. The argument that firm should be subject to regulation of at least some of their activities tends to be couched in terms of "market failure". The purpose of regulation is to iron out market imperfections so as to restore market governance. What typically is aimed at is a sort of market governance through enforcing the effect of such governance when the market itself has failed to be self-enforcing.

The propensity of mainstream economists to look first and foremost to market coordination to allocate resources has downplayed the growing importance of planned coordination within the business organization and the growing dominance of the business organization over the determination of many regulatory outcomes (Lazonick, 1991). The modern corporations should not be understood as aberrant products of the market. They are designed to oust the market. Therefore, what mainstream view of "market failure should somehow be viewed alternatively as "organizational successes". As the competitive advantages of firms would merely lead to them ousting the market again, any such policy toward restoring market governance stop right where regulation needs to start. As such, regulation of corporation's economic activities is prone to be ineffective when it is conceived of as a corrective to market failure, because the solutions put forward refer the corporation back to a market which just does not exist, and leave a vacuum just where regulation should be effective by the ousting of market that causes the systematic obstructions to optimal allocations in the first place (Campbell, 1993). To overcome "the myth of market" (Lazonick, 1991) paradox now prevalent in theoretical prescription, a full appreciation of the coexistence and equal significance of market economy and organizational economy in the advanced capitalist economy are essential to understand the political task necessarily involved in corporate regulation. As noted by Campbell (1993), the issue is not to approximate a return to the market of capitalist property, but to determine the political structure which will allow the adoption of marginalist techniques for the control of the modern economy.

1.2 New Economics Perspective on Policy Intervention

It has long been assumed in most of the practices of policy interventions that the social and economic interactions among organizations or individuals can be coordinated either through conscious design, in an effort to reduce uncertainty, or through spontaneous acts. The former represents the institutional arrangements that regulate the pattern of interactions, be they organizations, inter-organizational networks, or markets. The latter represents the invisible hand of marketplace This assumption has been challenged for the reason that there is a difference not in kind but in degree between organizations, inter-organizational fields, and marketplaces (Arrow, 1974; Williamson, 1975; Ouchi, 1980; Simon, 1991), and that, as noted in previous section, restoring analogies to market governance is highly problematic when in fact the corporation is designed to oust the market in the first place (Lazonick, 1991; Campbell, 1993).

Theoretical contributions following this venue are mostly under the purview of transaction cost economics, which views market failure as one type of transaction failure that needs to be governed (Williamson, 1975, 1985). Despite the divergent views toward the relation among alternative institutional arrangements, i.e., organization, market, or hybrid form, transaction cost approach provides a robust and proliferating framework for policy intervention since transaction cost arguments would enable policymakers to identify the range of governance structures that are to be employed to achieve targeted intervention, and regulation is only one choice variable of governance structures.

In the literature of the new economics, transaction cost theory and agency theory play the major role in the explanations of what are the alternative forms of governance mechanism and contractual arrangements. Despite their respective contributors, transaction cost and agency theory are inextricably related in situations where transaction cost and agency cost might disturb the equilibrium position. Agency theory is concerned with describing the governance mechanism that can resolve or limit the agency problem; and, in similar vein, transaction cost theory is concerned with the evolving mediating mechanism as a response to transaction failures. Hence, terms such as transaction costs and opportunism are sometimes couched in terms of information cost and information asymmetry. In the paper, those terms are used interchangeably except when their distinction bears on the implications for public organization.

Transaction cost approach has been explored by scholars to address issues in the public sector. Terry Moe was the foremost among them to sketch the outlines of a political theory of public bureaucracy based on the premises of new economics (Moe, 1984, 1990), but consequential differences between economics and politics has directed him to question whether new economics carry over from the private to public sector. Like Moe, North (1990) also contends that efficiency reasoning can hardly be applied to politics. Some scholars such as Wilson (1989), Dixit (1996), Williamson (1999) are more sanguine about the construction of a transaction-cost politics perspective. Still, Heckathorn and Maser (1987) have analyzed government regulation within the framework of transaction theory; and Bryson and Ring (1990) have used public education to illustrate the transaction-based approach to policy intervention. The following is devoted to summarize those elements of new economics perspective which bears the implications for policy intervention.

Transaction cost theory defines a transaction as the transfer or exchange of good and services across an organizational boundary (Williamson, 1975). The purpose of transaction cost theory, as noted by G. R. Jones (1983), is to "identify the sources of transaction costs -- those characteristics or dimensions of a transaction that make exchange problematic or prohibitively expensive -- and then to specify the governance mechanism that can most efficiently handle the transaction so as to economize on these costs". The six main factors (Williamson, 1985) producing transaction difficulties are as follows:

1. **Bounded Rationality --** The rationality of human behavior is limited by the actor's ability to process information.
2. **Opportunism --** Human beings are prone to behave opportunistically. Opportunism means self-interest seeking with guile.
3. **Uncertainty and Complexity --** The real world is characterized by considerable uncertainty and complexity.
4. **Small Numbers --** In the real world small numbers trading relationships are frequently found.
5. **Information Impactedness --** Information pertaining to a transaction is frequently asymmetrically distributed between parties to an exchange.
6. **Asset Specificity --** This refers to investment in assets that are specific to the requirements of a particular exchange relationship. Making exchange-specific investments increases transaction uncertainty and therefore the transaction costs that have to be incurred as organizations collect the information and knowledge necessary to manage an exchange

relationship.

In addition to the six critical dimensions of transaction that have the potential to cause transaction failures, two additional dimensions should be discussed in the area of public policy or involving public goods: excludability and jointness of consumption (Savas, 1987). To sum, the basic logic of transactions cost economics is that transactions should be governed in a way that can economize on all forms of exchange cost as defined by some prescribed governance principles. Ordinarily, market is the most preferred governance mechanism in term of economic efficiency being its criteria. But when markets fail to govern transactions efficiently because other governance principles - equity, justice, and other forms of efficiency - preempt the economic efficiency concern, different forms of governance mechanism i.e., hierarchy or regulation, will emerge to govern the transaction by either "internalizing" the transaction or reassigning the property right all with a view to avoid transaction failure. The central tenet of Williamson's transaction cost theory is to first identify the critical dimensions that have the potential to cause transaction failure, then to align transactions with governance structure in a discriminating way (Williamson, 1981).

Governance structure is the focal point of policy intervention. Transaction cost approaches prescribes the appropriate governance structure as a function of transaction characteristics, namely, governance structure as emerging from the interaction between transaction parties to fulfill some prescribed governance principles - efficiency, equity, justice, etc. (Williamson, 1981). Transaction-based approach to policy intervention is the identification of the range of governance structures that can be employed to achieve targeted intervention. These governance structures are products of institutions that control or regulate transactions (Ouchi, 1980, Ostrom, 1986). All policy interventions are intended to facilitate the transfer of property rights in order to achieve governance principle manifested in policy formulation stage. And governance structures are matched with differing transaction profiles in a discriminating way in order to provide effective governance accordingly to principles or expectations. And the principles or expectations might differ across institutional fields.

To sum, a transaction-based approach to policy intervention should therefore possess characteristics: (1) It should be detailed and specific enough to allow for targeted interventions; and careful explication of both the failures the intervention is fixing, on the one hand, and the failure to which the intervention itself is prone, on the other hand. (2) The approach should encompass a broad range of governance structures, not just markets or hierarchies, and governance structures are not all of a kind so that differences between them need to be distinguished. (3) Governance principles - efficiency, justice, liberty, etc. - should be included as criteria to choose among various governance structures. (4) The approach should supply rules for switching transaction governance structures. And finally, (5) in order to capture the continuity between an organization, an inter-organizational network, and a marketplace, a particular unit of analysis -- the transaction -- is required, for the concept of transaction permits us to understand the formation of inter-organizational relation not in sectoral manner that has given rise to tremendous amount of controversies with respect to the choices between various forms of governance

Most organizational economics literatures only analyze the ensuing organizational arrangements as responses to the efficiency imperative - economizing on transaction cost and reducing human bounded rationality give opportunism - and rarely have the other concerns of governance principles, such as equity, justice, or social responsibility, or the trade-off between these principles been explored to bear on the implications for governance structures or strategic choice in organizational action.

II. Bureaucratic Decision Making

2.1 Theoretical Underpinning of Bureaucratic Decision Making

The notion of bureaucratic decision making has evolved from and has been used interchangeably with the notion of organizational decision making for three reasons. First, bureaucratic decision making does not only imply decision making in a bureau setting but also extend to include any organizations that has bureaucratic characteristics, notably highly hierarchical structure and constrained, to a large extent, by political influence. Second, in the jargons of organizational economics, bureaucracy is but one variant of structure choice which govern the delivery of good and service and can hereto be amendable to the treatment of organizational economics (Williamson, 1975, 1985; Moe, 1984). Third, the theoretical underpinnings of bureaucratic decision making were mainly contributed by organizational theorists or by economists and political scientists who were highly interested in organization theory.

Theories of organizational decision making have developed within very broad traditions. Decision theory, statistics, operation research, microeconomics, cognitive psychology, information theory, cybernetics, social exchange, and coalitional power are various approaches to the inquiry of how human agents perceive, codify, interpret, and respond to their environments in conscious ways. Although the theories of bureaucratic decision making draw on the visions of the above mentioned perspectives, the major emphasis of bureaucratic decision making is how the organizational settings that characterize a bureaucracy influence organizational choice behavior as a whole or its members' own individual choice behavior. Consequently, the organizational characteristics--hierarchies, structures, communications, authority and cultures--make the bureaucratic decision making one of the most complex and overtly political activities in organizations and can not be examined through a institution-free perspective. The ongoing debate in Public Administration about the separation of policy making and administration is the manifestation of what is the proper domain of decision making in bureaucratic setting.

In a description of the development in theories of organizational decision making, March and Simon (1958) began with a simple conception of organizations acting in the anticipation of future uncertain preferences and consequences of current actions, and then complicated such a conception by exploring the ways in which information was not provided automatically or costlessly, and the ways in which goals may be in conflict among stakeholders. With this assumption, then they explored the extent to which organizational choice was based on rules and standard operation procedures developed through organizational learning.

Here the picture of organizational decision making corresponds to Simon's saticficing model (1945), Lindblom's incremental model (1959), Alison's organizational process model (1971). The picture was further complicated by exploring the ways in which ambiguity about preferences, technology, and objective confound rational action and organizational learning; the organizational choice hereto entered into a highly contextual and symbolic world in which organizational decision making become efforts to make some sense out of the naturally occurring events of organizational life. Cohen, March and Olsen's garbage can model (1972), Kingdon's agenda setting model (1984), Allison's governmental politics model (1971), Pfeffer and Salancik's political process model (1978), and Cyert and March's coalitional power model (1963) all attest to the contextual and symbolic features of organizational choice.

2.2 Organization Economics and Decision Making

Organization economics is a field accomplishing a synthesis between economics and organization theory -- using organization theory to inform economics in the study of firm and market structure (Williamson, 1975, 1981). Transaction cost perspective or the visible hand perspectives on organizational decision making focus on the relationship between decision settings, with their attendant uncertainty, controversy, or transaction failure, and the kinds of governance structures that emerge in response to these settings. This perspective views governance structures or organizational arrangements as products of organizational choice to reduce transaction cost (Coase, 1937; Williamson, 1985); to obtain technological capability (Nelson & Winter, 1982); to attenuating bounded rationality opportunistic behavior (Williamson, 1981); to create an internal capital market in order to achieve an efficient allocation of capital (Williamson, 1981); or to mitigate the agency problem arising form the separation of ownership from control (Berle and Means, 1932).

Although many organizational economists have been associated with the Carnegie school, their views on the relationship between institutional arrangements and human choice represent a departure from those of March and Simon's (1958). While March & Simon maintain that institutional arrangements can limit or enhance human choice, organizational economists contend that institutional arrangements are the products of human device. Even Coase's arguments have been resisted by many organizational economists, this points to an important disparity among organization economists, and has significant impact on what aspects of new economics can be extracted to make the transition from economics to politics more smoothly. Coase claimed that the existence of the firm and the "distinguishing mark of the firm is the suppression of the price mechanism", the replacing of voluntary market transactions with hierarchical direction.

Yet many organization economists have maintained that virtually all of the characteristic features of market economics can be transferred to the hierarchy, i.e., contractual relationship of internal firm can be viewed as taking on the features of market-like price mechanism (Williamson, 1980; Jensen and Meckling, 1976). For instance, Williamson and Ouchi (1981) have explicitly recognized:

Except when there are perversities associated with the funding process, or when strategically situated members of an organization are unable to participate in the prospective gains, unrealized efficiency opportunities always offer an incentive to organize.

Along with Williamson and Ouchi (1981), Alchian and Demsetz (1972) have insisted that hierarchical firms do not partake of political authority and Jensen and Meckling (1976) have maintained that the relationship between the firm and the employee are contractual and thus politics has no place in the contractual argument.

Although noted by Moe (1984) and North (1990) who have suspected the applicability of the efficiency imperative underlying most organizational economists' works to public settings, the efficiency imperative and contractual relation has two purposes to serve. First, they try to construct an organization theory that can capture the explanatory power of their most competing opponent -- sociological perspective, most notably coalitional power theory (Cyert and March, 1963) -- by arguing that political authority and power are irreverent and can be subsumed by the "efficiency hypothesis". Second, the focus on internal organization as a nexus of voluntary contracts entails the power of market economics to be applied to these contracts. The efficient capital market can then drive the relationship involving the firm to the most efficient contractual forms (Fama, 1983; Jensen and Meckling, 1976).

The persistence of empirical anomalies, which run counter to those predicted by efficiency hypothesis of contractual forms, has prompted some (Baker, Jensen, and Murphy 1988; Miller, 1992) to argue that the persistent use of inefficient practices within hierarchies is irreconcilable with the very rationale for the existence of hierarchy, which is to correct market imperfections. It may be that sociologists, behavior scientists, and psychologists understand something about human behavior and motivation that is not yet captured in organizational economics. Transaction cost theory, or agency theory along, presents a partial view of the world that ignores many aspects of complex organization. Simon (1991) has made similar observations in his article titled "Organizations and Markets":

The attempts of the new institutional economics to explain organizational behavior solely in terms of agency, asymmetric information, transaction costs, opportunism, and other concepts drawn from neoclassical economics ignore key organizational mechanisms like authority, identification, and coordination, and hence are seriously incomplete.

Moreover, Simons' observations are supported by two major developments in organization literatures that have their focus on new economics.

The first development is the increasing use of multiple theories to yield a more realistic view of organizations; agency theory or transaction cost is used with complementary theories. For example, Eisenhardt (1988) combines agency perspective and institutional perspective to achieve a better understanding of compensation policy. The institutional emphasis on tradition or industry practice complements the efficiency emphasis of agency theory. Similarly, Mahoney (1992) and Palmer et al. (1987) have examined the proposition that the M-Form structure is determined by both power and efficiency imperatives. Other examples include Kosnik's (1987) studied using agency theory in conjunction with hegemony and managerialism to explore the political aspects of golden parachutes and greenmail.

The second development is that new economics is becoming isomorphous with other organization theories. Unlike some organization economists' claim that agency theory is a revolution in organization theory (Jensen and Meckling, 1976), at its roots, agency theory is consistent with Barnard's and March & Simon's theories on cooperative behavior and equilibrium inducements prevailing the employment relationship. Agency theory is also similar to political models of organizations (March and Cyert, 1963;

Pfeffer, 1981) in that both perspective assume individual self-interest behavior and goal conflict at the organization level. The difference is that, noted by Eisenhardt (1989), "in political models goal conflicts are resolved through bargaining, negotiation, and coalition -- the power mechanism of political science." In agency theory, "they are resolved through the coalignment of incentives - the price mechanism." And by its nature, agency theory is similar to the information processing approach and the organizational control literature.

2.3 Organized Anarchy and Political Power Model of Decision Making

Organized Anarchy emerged as a response to the questioning of whether or not the concept of preferences makes sense at any level of analysis. One of the arguments raised is the causality between preferences and choice. In other word, the meaning of preferences is retrospective and follows the action; or one only knows what one has done after he has done it. Goals are seen as the products of sense-making activities which are discovered after the action has occurred to rationalize it. The basic idea of the model is that decision points are opportunities into which problems and solutions are dumped by organizational participants (Cohen, March, and Olson, 1972). Events unfold in ways predictable only by considering the processes, and much of the consistency and intentionality observed in organizations is imputed by observers rather than being a characteristic of organization being observed. Although this model provides a language for describing the randomness observed in organization, the lack of predictive power is its drawback.

The coalitional view of organizations was developed by Cyert and March (1963) is their description of organizational decision making. The political model views organization as coalitions of interest, divided and pluralistic, and hence conflict is viewed as normal or customary in political organization. Because action results from bargining and compromise—action does not presuppose some overarching intention—

the resulting decision seldom reflects the preferences of any group within the organization (Allison, 1971; Pfeffer, 1981). To understand organizational choices using a political model, it is necessary to understand who participates in decision making, what determines the participants' stance on issues, what determines each actor's relative power, and how the various preferences are translated by the decision process into policy outcome (Allison, 1971;Wamsley and Zald, 1973).

III Theoretical Perspectives on Regulation

3.1 Preliminary Notes on Theories of Regulation

Historically, the regulation study has been the domain of economists, almost to the neglect that regulation is studied in a variety of ways. The sources of literature are diverse, while scholars interested in the subject are to a great extent fragmented by their disciplinary loyalties. In economics, especially in public choice model, the regulatory process was explicitly treated as a system of market-like exchange, self-interested rational actor seeking to exchange inducements such as favorable votes and regulation (Stigler, 1971; Peltzman, 1976; Becker, 1983). It is shown that firms often seek relief from the pressures of a competitive market via the process of rent-seeking in the regulatory processes (Stigler, 1971; Buchanan, Tollison and Tullock, 1980). What could have lost in competitive market can be recovered from political market, and thus there is always a market for regulation.

Although studies following this tradition provide useful insights into the political behavior of firms as well as on the relationship between various branches of government, the strategic behavior of individual firm is seen as of lesser significance (McCormick, 1989). In political science and sociology, constant debates are exchanged between pluralist and elitist, instrumentalist and structuralist, for the reason that whether or not the collective ideology of business sector can be identified and, once identified, its resultant impact on the democratic process (Useem, 1979; Schwartz, 1987; Mizruchi, 1992). Regulatory politics, in light of this tradition, like other social action, is embedded in social structures that influence whether, when, and how collective action is accomplished by interest groups (Davis and Thompson, 1994). Thus, the regulatory outcomes are conditioned by the competition between a multitude of interests.

The managerial perspective was slow to incorporate regulatory industry into systematic scholarly pursuit, but has long recognized that the relationship between business and government has been a subject that concerned scholars from Adam Smith and Alfred Chandler to Charles Lindblom and Lester Thurow. Given the pervasiveness of government influence on business, competition is just as much a part of corporate activity in the political arena as in the economic marketplace (Marcus, Kaufman & Bean, 1987; Mitnick, 1993). In approaching the issue of government regulation of business, the managerial perspective is again fragmented by attachment to different social disciplines. Researchers from strategic management literature have mainly adopted approaches developed from industrial organization. Following the paradigm of structure-conduct-performance, it is posited that if regulatory policy were exogenously formulated and implemented, optimal performance could be obtained. But policy is not exogenous and firm have incentives, recent studies in this tradition have centered upon the strategic adaptations and response, such as vertical integration, diversification and M-form structure, to government regulation (Hrebiniak, 1985; Joskow, 1985a, 1985b; Russo, 1992; Palmer, Jennings and Zhou, 1993).

Another main stream of research comes from scholars interested in corporate social performance as well as corporate political activity (Preston, 1986; Marcus, et. al., 1987; Mahon, 1989; Mitnick, 1993). Studies from this venue have asserted that the policy process or the regulatory process has been strategically used by firms as a means of enhancing their legitimacy in the eyes of external constituents. Therefore, firms engage in a variety of political activities - public affair function, issue management, constituent building, etc. - and the effectiveness of these activities in turn secure either permanent or temporary advantage and influence over actors in the same market (Mahon, 1989). Still, there are others who proceed the issue of government regulation of business from the vintage of pinpointing the locus of control mechanism existing in both corporation and government. The literature on corporate governance and its parallel development in the market for political control have gradually gained ground as more and more researchers strive to unveil the rationale for why certain governance structures or organizational forms prevail over others and propose optimal regulatory structures accordingly (Williamson, 1975; Grossman & Hart, 1980; Fama, 1980; Jensen, 1986; Davis and Stout, 1989; Davis and Thompson, 1994).

3.2 Modern Political Economy of Regulation

The study of regulation has historically paralleled the evolution of political economy to the extent that any careful explication of regulatory phenomenon should be termed political economy of regulation to be authoritative in its theoretical underpinnings (Mintnick, 1980; Noll, 1989; Baron, 1989). A brief discussion of modern political economy would invariably facilitate our understanding of the evolution of political economy of regulation both in its origin and its process, as well as providing us with the framework to tackle the issue of the failure of regulation that has generated the emerging trend toward deregulation and privatization. As the progress of political economy provides a nature way to cross-fertilize the separate disciplines of political science and economics, it also shed some light on a more balanced treatment of the various parts of public behavior within the preview of regulation.

A rejoining of political science and economics into political economy has led to fruitful research in areas where the interaction of individuals, institution, and market become paramount, a development could not be possibly obtained if the two were to be formally split and biased the way in which economists and political scientists approach many issues. The study of political economy expands and improves existing lines of economics and political science inquiry by cross-fertilizing the separate disciplines with import approaches and thinking. The political scientist's emphasis on institutions has helped the analysis of the economic effects of regulation by directing our attention to how market and political forces have shaped the institutional structure and its resulting performance. Conversely, the economist's individual choice perspective has made political science examine more critically its theories about the formation, evolution, and maintenance of institutions.

Although the resurgence of political economy has generated and spurred a renewed interest in the study of regulation beyond that which was inspired by merely public interest paradigm or the capture theory pioneered by Olson (1965) and Stigler (1971), the initial stages of political economy of regulation tended to be unbalanced. The economist, tended to graft on simplistic models of politics, look at regulation as the outcome of a market with demanders and suppliers. The demanders are special interest groups and the suppliers are politicians and bureaucrats who are all acting rationally in their own interest. The political scientists, on the other hand, tended to graft on distorted model of market outcomes in developing models of political behavior, focus more on the supply side of regulation, but not on the rational actors as much as on the constraints that the suppliers face. For example, economists tend to view regulation as joint outcome of a decision-making process by various regulators; whereas political scientists approach regulation by looking at how various types decision rules or voting rules affect outcomes or how decision making under various institutional constraints leads to different outcomes.

With the advancement in the analytical tools such as game-theoretic modeling, many political economists are now able to lend a more balanced treatment toward regulation by concentrating on the intricate interactions of politics and economics through institutions. The dynamic process underlying many regulatory decision has been unveiled through the lens of game theory. The recent development in game-theoretical model has enabled analysts to endogenize many features such as unforeseen contingencies, incomplete information, hidden game, credible commitment, reputational effect, etc, all characteristics of institutional dynamics, that in the past have been assumed away or ignored totally to the extent that the theory is hardly pegged squarely with the empirical evidence.

Although the extensive use of game-theoretical framework in regulatory endeavor has brought many students of regulation and policy makers closer to the dynamic setting of regulatory environment, this framework is deficient in not letting competing theories of regulation to be compared and evaluated. The collection of case studies assembled by Wilson (1980) illustrates how each regulatory domain develops a distinctive perspective on regulation so that it cannot be understood by references to general principles alone, and as a result a comprehensive framework is needed. As many have proposed the need for a theoretical framework that can incorporate the dynamic features of regulation as will as many theories of regulation, unfortunately, no theory yet exists to provide more explanatory power than existing theories combined. But a possible precursor to such a theory should have a number of properties. First, it should allow for choices of policies by legislatures and rules by regulatory agencies and commissions. Second, the theory should take into account the economically efficient as well as the politically optimal consequences of regulatory alternatives. Third, it should incorporate key institutional features. For example, as applied to regulatory agencies, it should encompass congressional oversight, rule-making procedures, judiciary review process, and internal institutional arrangement such as the flow of information, and hierarchies of control. As applied to legislatures, the theory should include majority rule, both agenda setting and agenda denial (Cobb and Ross, 1997), presidential veto, and committee structure.

Although the non-cooperative game theory as developed in the sequential bargaining or the signaling game literature possesses a very bright prospect to become such a precursor (Bank, 1987; Baron, 1993, 1994) for it incorporates the properties mentioned above, little consensus regarding the objectives of regulators and the sources of influence over agency decision-making has precluded the tests of competing theories of agency behavior (Olson, 1995). Various theories of agencies regulatory behavior have very different views about what are the forces that agencies respond to and why do agencies choose the actions that they do, and the different views have in turn brought about different assumptions regarding the relationship between Congress and the bureaucracy. One can abstract from various theories of agency behavior that Congress, industry interest group, consumer welfare, and ideology all play a part in agency decision-making. Yet only a few studies have attempted to compare the competing theories of agency behavior (Magat, Krupnick, and Harrington 1986; Rehbein and Lenway, 1994; Olson, 1995).

IV Political Governance of Policymakers and Political Effectiveness of Interest Groups

Regulatory decision making encompasses all the elements and essences described in the aforementioned sections. Intuitively, one can sense that the processes of government intervention, bureaucratic decision making, and regulation all converge into a realm called regulatory decision making. Yet, theoretical frameworks or models are needed exclusively to account for the specific aspect of decision making in public sector called regulatory decision making. The frameworks employed in the area of regulatory decision making should be able to account for the political governance of policymakers on one side, and the political effectiveness of interest groups on the other. Taking into account the political governance of policymakers is to acknowledge the design features of democratic political institutions, especially the American system of separation of powers which has given rise to the unique structure of political governance and has been under extensive studies by various scholars. The inclusion of the political effectiveness of interest group in regulatory settings is to acknowledge that the empirical realities of the effects of regulation -- inefficiencies and obvious re-distributional practices -- play a central role in testing political theories of regulatory policy (Noll, 1989).

The political governance of policymakers is accorded with elements of transaction costs and information imperfections that would permit an inefficient political equilibrium that deliver distributive benefits in ways that are predicted by the nature and sources of these factors. The focal policymaker or regulator is said to operate under both the constraints and opportunities of political institutions. The design mechanism of U.S. political institutions maintains a trade-off between legislative drift and bureaucratic drift (Horn and Shepsle, 1989; Macey, 1992). The very design feature affords public decision makers to operate within both the realm of the rationality of political interest and the realm of the rationality of policy interest. Given the complexities of nowadays democratic system, it is nearly impossible to predict the outcome or effect of regulatory policy by presupposing, a priori, the motives of policymakers.

Regardless of the motives of political actors, an essential ingredient to a theory of regulatory policy making when the Coase Theorem fails is how political officials control agencies. Whether the aim of regulation is to maximize efficiency, to transfer wealth to a special interest, or to generate outcomes that mirror the political equilibrium existing at initial political bargaining, politicians face a common problem -- a principal-agent problem in trying to assure reasonable bureaucratic compliance with legislative objectives. An adequate theoretical pursuit should therefore capture the design features of political institutions in their abilities to contain the principle-agent problem on one hand, and, on the other hand recognize the fact that electoral institutions fall short of granting all interest equally effective political power, thereby allowing the distribution of rent through regulatory policy to be dependent on how well the various interests are organized and how effective are their tactics in achieving aims.

There exist literatures in the field of regulatory decision making which do not presume that regulators or policymakers bow to the demand of coalitional drift or bureaucratic drift, or to the dictate of political interest or policy interest, thereby allowing some slack to be consumed by regulators in the form of ideological shirking (Kalt and Zupan, 1984, 1989) or in the form of personal service to organized interest group. The literatures following this venue are generally exploring the effect of regulatory policy or decision making as function of the convergence between public policy process and business policy process. These literatures focus on the challenges and demands on both public and business policy makers when they converge on the "issue creation" process or policy intervention process by including major stakeholders with their diverse political, economic, and ideological views as well as the complex institutional forces that shape business, government, and society. These literatures differ only with respect to the model or framework used. One stream of literatures, coming from separate but related sources, employ either the "interpenetrating system" approach to issue management as developed by Preston and Post (1975), or the stakeholder approach advocated by Freeman (1984). The other stream of literatures employ a quasi-organizational view toward regulatory agencies as the focal point of "consensus networks" within which parties will generally compromise and agree to general procedures and goals. This approach was first developed by Paul Joskow (1974) and further refined by Roger Noll (1985) to be termed the external-signal model.

The foundation for the model (see Figure 1) of issue management or stakeholder approach comes from staging an "issue set" as focal point and then accommodate the various choices that decision maker have to make as the "issue set" goes through the various decision-making processes. The analysis of decision processes as it relates to the "issue set" creation process involves the analysis of all related groups involved in both the public policy and corporate policy decision. It is not enough merely to list which groups are interested in a particular issue and how are these various groups related. This model allows researchers to account for the intensity each of these interest groups brings to an issue. One could measure this factor by the amount of funds devoted to an issue, the amount of attention paid via corporate public affairs activities, and the numbers of political agents being employed to demonstrate both political and economic power that a group can bring to the decision making premises.

The external-signals model posits the regulatory agencies as focal the decision maker seeking positive feedback and avoiding adverse feedback from outside group. The model suggests that regulatory agencies based their decision on the relative strength of signals received from various sources. A detailed explication of this model is not the purpose of this paper, and hence here is devoted to review several researchers (Bawn, 1995; Magat et al., 1986; Olson, 1994; Rehbein & Lenway, 1994) who have used the external signals model to analyze different aspects of regulatory decision making. In a remarkably detailed study of water pollution regulation by Environmental Protection Agency (EPA). Magat, Krupnick & Harrington (1986) examine both the impact of an industry's political efforts and its structural characteristics on EPA's development of industrial effluent standards, and the ways in which efficiency and distributional objectives were traded off by the agency. Bawn (1995) uses the model in a theoretical analysis of the different types of administrative arrangements that govern regulatory agencies such as EPA, Consumer Product Safety Commission, and Occupational Safety and Health Administration (OSHA). Olson (1994) uses the model to explain how external factors influence FDA approval decision among competing industries and the types of regulatory tools selected by FDA. In applying the external signals model, Rehbein & Lenway (1994) examine the impact of an industry political tactics as well as its structural characteristics on the U.S. International Trade Commission's (ITC) decision-making processes. Their focus on the regulatory agency permits them to observe more directly the relationship between an industry's political activities and political outcomes, a relationship that is much more difficult to observe in the legislative arena.

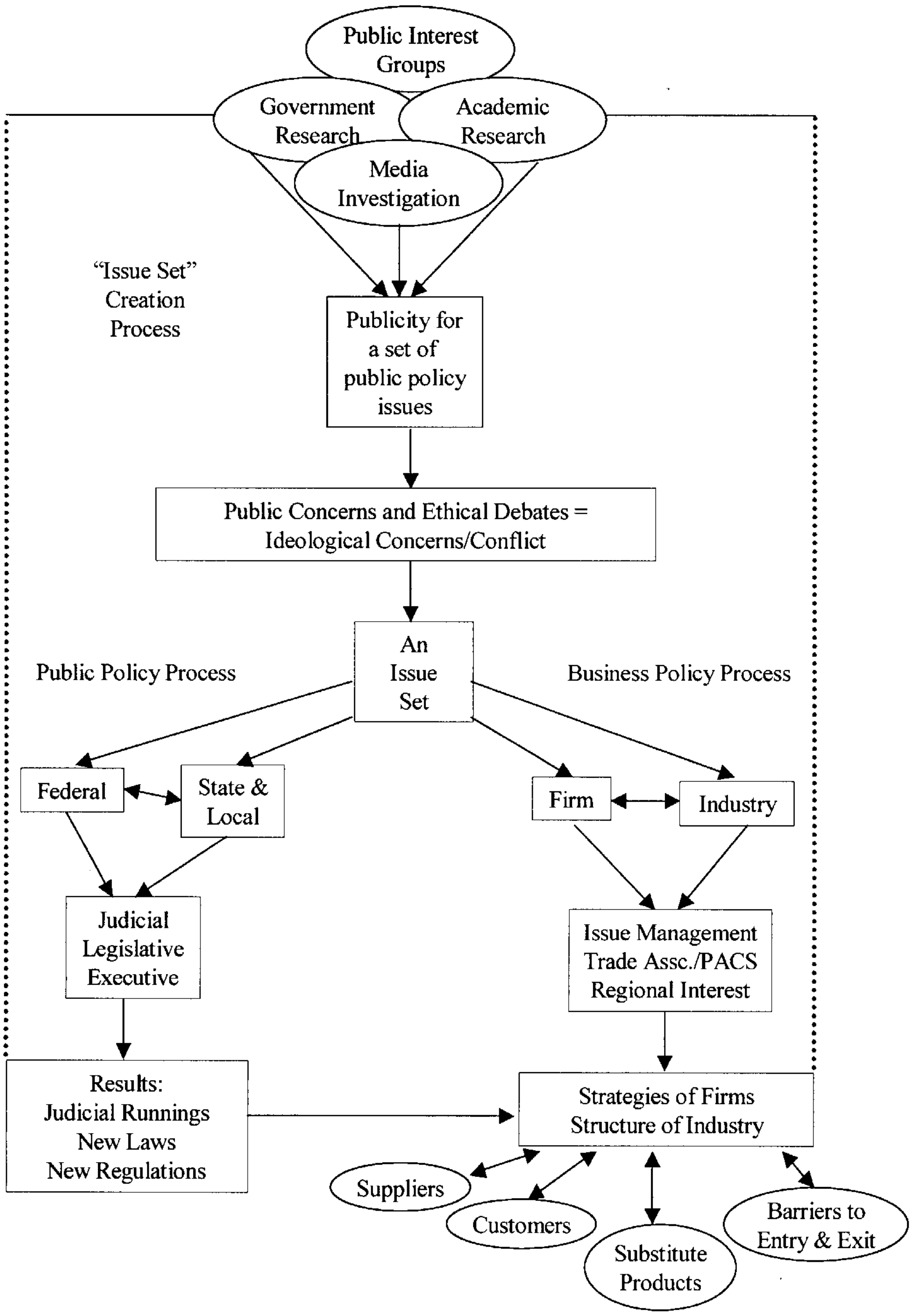

Figure1 A convergence model of business and public policy

From: Mc Gowan, R.A. *Business, politics and Cigarettes: Multiple Levels, Multiple Agenda.* Westport. Conn: Greenwood Press, 1995

References

Alchian, A. A. and H. Demsetz (1972). "Production, Information Costs, and Economic Organization." ***American Economic Review***, 62: 777-95.

Alison, G. T. (1971). ***Essence of Decision Making: Explaining the Cuban Missile Crisis.*** Boston: Little Brown.

Arrow, K. (1974). ***The Limits of Organization.*** New York: W. W. Norton.

Baker, G. B., Jensen, M. C. and K. J. Murphy (1988). "Compensation and Incentives: Practice versus Theory." ***Journal of Finance***, 43: 593-616.

Baron, D. P. (1989). "Design of Regulatory Mechanisms and Institutions." In ***Handbook of Industrial Organization***, edited by R. Schmalensee and R. Willig. North-Holland, Amsterdam, 1989, 1253-87.

Baron, D. P. (1993). "A Theory of Collective Choice for Government Programs." Working Papers, Stanford University.

Baron, D. P. (1994). " A Sequential Choice Theory Perspective on Legislative Organization." ***Legislative Studies Quarterly***, (May): 267-96.

Bawn, K. (1995). "Political Control versus Expertise: Congressional Choice about Administrative Procedures." ***American Political Science Review***, 89: 62-73.

Becker, G. S. (1983). "A Theory of Competition among Pressure Groups." ***Quarterly Journal of Economics***, 98: 372-99.

Berle, A. A. and G. C. Means (1932). ***The Modern Corporation and Private Property***. New York: Macmillan.

Bryson, J. M. and P. Ring (1990). "A Transaction-based Approach to Policy Intervention." ***Policy Sciences***, 25:.

Buchanan, G. M., Tollison, M. R. and G. Tullock (1980). ***Toward A Theory of the Rent-Seeking Society***. College Station: Texas A&M University Press.

Campbell, D. (1993). "Why Regulate the Modern Corporation? The Failure of 'Market Failure'." In ***Corporate Control and Accountability: Changing Structures and the Dynamics of Regulation***, edited by J. McCahery, S. Picciotto,, and C. Scott. Oxford, UK: Oxford University Press, 1993: 103-32.

Coase, R. H. (1937). "The Nature of the Firm." ***Economica***, 4: 385-405.

Cobb, R. W. and M. H. Ross (1997). "Agenda Setting and the Denial of Agenda Access: Key Concepts." In ***Cultural Strategies of Agenda Denial***, edited by R. W. Cobb and M. H. Ross. Lawrence, Kansas: University Press of Kansas, 1997:3-24.

Cohen, M. D., March, J. G. and J. P. Olsen. (1972). "A Garbage Can Model of Organizational Choice." ***Administrative Science Quarterly***, 17: 1-25.

Cyert, R. M. and J. G. March (1963). ***A Behavioral Theory of the Firm***. Englewood Cliffs, NJ: Prentice-Hall.

Davis G. and S. Stout (1989). ***The Rise and Fall of the market for Corporate Control: A Dynamic Analysis of the Characteristics of Large Takeover Targets.*** Photocopy.

Davis, G. F. and T. A. Thompson (1994). "A Social Movement Perspective on Corporate Control." ***Administrative Science Quarterly***, 39: 141-73.

Dixit, A. K. (1996). ***The Making of Economic Policy: A Transaction-cost Politics Perspective***. Cambridge, Mass: MIT Press.

Eisenhardt, K. M. (1988). "Agency and Institutional Theory Explanations: The Case of Retail Sales Compensation." ***Academy of Management Journal***, 31: 301-25.

Fama, E. F. (1980). "Agency Problems and the Theory of the Firm." ***Journal of Political Economy***, 88: 288-307.

Fama, E. F. (1983). "Separation of Ownership and Control." ***Journal of Law and Economics***, 26: 301-25.

Freeman, R. E. (1984). ***Strategic Management: A Stakeholder Approach***. Marshfielf, Mass.: Pitman.

Grossman, S. J. and O. D. Hart (1980). "Takeover Bids, the Free-Rider Problem, and the

Theory of the Corporation." ***Bell Journal of Economics***, 11: 42-64.

Heckathorn, D. and S. Maser (1987). "Bargaining and the Sources of Transactions Costs: The Case of Government Regulation." ***Journal of Law, Economics and Organization***, 3: 69-98.

Horn, M. and K. Shepsle (1989). "Commentary on Administrative Arrangements and the Political Control of Agency: Administrative Process and Organizational Form as Legislative Responses to Agency Cost." ***Virginia Law Review***, 75: 499-508.

Jensen, M. C. (1986). "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers." ***AEA Papers and Proceedings***, 76, 323-9.

Jensen, M. C. and W. H. Meckling (1976). "Theory of the Firm: managerial Behavior, Agency Costs, and Ownership Structure." ***Journal of Financial Economics***, 3: 105-60.

Jones, G. R. (1983). "Transaction Cost, Property Rights, and Organizational Culture: An Exchange Perspective." ***Administrative Science Quarterly***, 28: 454-67.

Joskow, P. (1974). "Inflation and Environmental Concern: Structural Change in the Process of Public Utility Price Regulation." ***Journal of Law and Economics***, 17: 291-327.

Joskow, P. (1985a). "Vertical Integration and Long-Term Contracts: The Case of Coal-Burning Electric Generating Plants." ***Journal of Law, Economics, and Organization***, 1: 33-80.

Joskow, P. (1985b). "Long Term Vertical Relationships and the Study of Industrial Organization and Government Regulation." ***Journal of Institutional and Theoretical Economics***, 141: 586-93.

Kalt, J. and M. Zupan (1984). "Capture and Ideology in the Economic Theory of Politics." ***American Economic Review***, 74: 279-300.

Kingdon, J. W. 91984). ***Agendas, Alternatives, and Public Policies***. Boston: Little, Brown.

Lazomick, W. (1991). ***Business Organization and the Myth of the Market Economy***. New York: Cambridge University Press.

Lindblom, C. E. (1959). "The Science of Muddling Through." ***Public Administration Review***, 19: 79-88.

Macey, J. R. (1992). "Organizational Design and Political Control of Administrative Agencies." ***Journal of Law, Economics, and Organization***, 8: 93-125.

Magat, W., Krupnick, A. and W. Harrington (1986). ***Rules in the Marking: A Statistical Analysis of Regulatory Agency Behavior***. Washington, D.C.: Resources for the Future.

Mahon, J. F. (1989). "Corporate Political Strategy." ***Business in the Contemporary World***, 2: 50-62.

Mahoney, J. T. (1992). "The Adoption of the Multidivision Form of Organization: A Contingency Model." ***Journal of Management Studies***, 29: 50-72.

March, J. G. and J. P. Olsen. (1984). "The New Institutionalism: Organizational Factors in Political Life." ***American Political Science Review***, 78: 734-49.

March and Simon (1958). ***Organizations***. New York: John Wiley.

Miller, G. (1992). ***Managerial Dilemmas: The Political Economy of Hierarchy***. Cambridge: Cambridge University Press.

Mitnick, B. M. (1980). ***The Political Economy of Regulation: Creating, Designing, and Removing Regulatory Forms***. New York: Columbia University Press.

Mitnick, B. M. (1993). ***Corporate Political Agency: The Construction of Competition in Public Affairs***. Newbury Park, CA: SAGE Publications, Inc..

Mizruchi, M. S. (1992). ***The Structure of Corporate Political Action: Interfirm Relations and Their Consequences***. Cambridge, Mass.: Harvard University Press.

Moe, T. (1984). "The New Economics of Organization." ***American Journal of Political Science***, 28: 739-77.

Moe, T. (1990). "The Politics of Structural Choice: Toward a Theory of Public

Bureaucracy." In Organization Theory: From Chester Barnard to the Present and Beyond, edited by O. E. Williamson. Oxford University Press, 1990: 116-53.

Nelson, R. R. and S. G. Winter (1982). ***An Evolutionary Theory of Economic Behavior and Capabilities***. Cambridge, Mass.: Harvard University Press.

Noll, R. G. (1985). "Government Regulatory Behavior: A Multidisciplinary Survey and Synthesis." In ***Regulatory Policy and the Social Sciences***, edited by Roger G. Noll. Berkeley, CA: University of California Press, 1985:9-66.

Noll, R. G. (1989). "Economic Perspectives on the Politics of Regulation." In ***Handbook of Industrial Organization***, edited by R. Schmalensee and R. Willig. North-Holland, Amsterdam, 1989, 1253-87.

North (1990). "A Transaction Cost Theory of Politics." ***Journal of Theoretical Politics***, 2: 355-67.

Olson, Mancur. (1965). ***The Logic of Collective Action***. Cambridge, Mass: Harvard University Press.

Olson, Mary. (1995). "Regulatory Agency Discretion among Competing Industries: Inside the FDA." ***Journal of Law, Economics, and Organization***, 11:.

Olson, Mary (1994). "Political Influence and Regulatory Policy: The 1984 Drug Legislation." ***Economic Inquiry***, 32: 363-82.

Ostrom, E. (1986). "An Agenda for the Study of Institutions." ***Public Choice***, 48: 3-25.

Ouchi, W. (1980). "Markets, Bureaucracies, and Clans." ***Administrative Science Quarterly***, 25:.

Palmer, D., Friedland, R., Jennings, P. D. and M. E. Powers (1987). "The Economics and Politics of Structure: The Multidivisional Form and the Large U.S. Corporation." ***Administrative Science Quarterly***, 32: 25-48.

Peltzman, S. (1976). "Toward a More General Theory of Regulation." ***Journal of Law and Economics***, 19: 211-48.

Pfeffer, J. (1981). ***Power in Organizations***. Boston: Pittman.

Pfeffer, J. and G. Salancik (1978). ***The External Control of Organizations***. New York: Harper and Row.

Preston, L. E. (1986). "Business and Public Policy." ***Journal of Management***, 12: 261-76.

Preston, L. E. and J. Post (1975). ***Private Management and Public Policy: The Principle of Public Responsibility***. Englewood Cliffs, NJ: Prentice-Hall.

Rehbein, K. and S. Lenway (1994). "Determining an Industry's Political Effectiveness with the U.S. International Trade Commission." ***Business and Society***, 33: 270-92.

Russo, M. (1992). "Power Plays: Regulation, Diversification, and Backward Integration in the Electric Utility Industry." ***Strategic Management Journal***, 13: 13-27.

Savas, E. S. (1987). ***Privatization: The Key to Better Government***. Chatham, NJ: Chatham House.

Simeone, R. S., Carnevale, J. and A. Millar (1998). "Performance-based Management and American Public Policy: The National Drug Control Strategy." Working Paper: Office of National Drug Control Policy.

Simon, H. A. (1945). ***Administrative Behavior***. New York: Macmillian.

Simon, H. A. (1991). "Organizations and Markets." ***Journal of Economic Perspectives***, 2: 25-44.

Stigler, G. (1971). "The Theory of Economic Regulation." ***Bell Journal of Economics and Management Science***, 2: 3-21.

Useem, M. (1979). "The Social organization of the American Business Elite and Participation of Corporation Directors in the Governance of American Institutions." ***American Sociological Review***, 44: 553-72.

Wamsley, G. and M. Zald (1973). ***The Political Economy of Public Organizations***. Lexington, Mass.: Lexington Books.

Williamson, O. E. (1975). ***Markets and Hierarchies***. New York: The Free Press.

Williamson, O. E. (1980). "Emergence of the Visible Hand: Implications for Industrial

Organization." In ***Managerial Hierarchies***, edited by A. D. Chandler and H. Daems. Cambridge, Mass: Harvard University Press.

Williamson, O. E. (1981). "The Modern Corporation: Origins, Evolution, and Attributes." ***Journal of Economic Literature***, 19: 1537-67.

Williamson, O. E. (1985). ***The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting***. New York: The Free Press.

Williamson, O. E. (1999). "Public and Private Bureaucracies: A Transaction Cost Economic Perspective." ***Journal of Law, Economics and Organization***, 15: 306-42.

Williamson, O. E. and W. G. Ouchi (1981). "The Markets and Hierarchies Perspective: Origins, Implications, Prospects." In ***Assessing Organization Design and Performance***, edited by A. Vade Ven and W. F. Joyce. New York: Wiley.

Wilson, J. Q. (1989). ***Bureaucracy: What Government Agencies Do and Why They Do It***. New York: Basic Books.