

Book Review

Regulation History as Politics or Markets

The Regulated Economy: A Historical Approach to Political Economy (Claudia Goldin & Gary D. Libecap, eds.). Chicago: University of Chicago Press, 1994. 312 + viii pp., bibliographies, index, drawings, tables. ISBN: 0-226-30110-9. Cloth. \$56.00.

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Introduction: The S-P-P and Neoclassical Models of Regulation

This interesting group of essays explores the history of American regulatory policy in an assortment of markets. The editors introduce their collection as “an effort to better understand the historical development of government intervention.”¹ Although some authors represented in the collection are more explicit than others, most accept some version of the Stigler-Posner-Peltzman (S-P-P) model of regulation, which views political bargaining among rent-seeking special interest groups as the best explanation of regulatory outcomes.² While this interest group model is often powerful, it is hardly the only model for explaining regulation. Most of the regulation described in these essays can be fully accounted for by neoclassical economics, whose regulatory theory looks at the characteristics of the economic market to which regulation is applied, rather than the political market in which the decision to regulate is made.

Under the S-P-P theory, interest groups form political coalitions in order to promote legislation that advances their own interests by limiting competition or restricting entry by new firms. Elected legislators

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1. THE REGULATED ECONOMY: A HISTORICAL APPROACH TO POLITICAL ECONOMY 2 (Claudia Goldin & Gary D. Libecap eds., 1994) [hereinafter THE REGULATED ECONOMY].

2. See, e.g., George J. Stigler, *The Theory of Economic Regulation*, 2 BELL J. ECON. & MGMT. SCI. 3 (1971); Richard A. Posner, *The Social Costs of Monopoly and Regulation*, 83 J. POL. ECON. 807 (1975); Richard A. Posner, *Taxation by Regulation*, 2 BELL J. ECON. & MGMT. SCI. 22 (1971); Sam Peltzman, *Toward a More General Theory of Regulation*, 19 J.L. & ECON. 211 (1976); Sam Peltzman, *The Economic Theory of Regulation After a Decade of Deregulation*, in BROOKINGS PAPERS ON ECONOMIC ACTIVITY: MICROECONOMICS 1 (1989); Sam Peltzman, *An Economic Interpretation of the History of Congressional Voting in the Twentieth Century*, 75 AM. ECON. REV. 656 (1985). Seminal to all of these is JAMES M. BUCHANAN & GORDON TULLOCK, *THE CALCULUS OF CONSENT* (1962).

presumably vote so as to maximize their chances of re-election. They tend to listen to constituencies that promise the greatest net marginal increase in votes. Whether regulatory outcomes are efficient depends largely on the evenness with which various interest groups influence the legislature. If all gainers and losers with respect to any proposal are equally represented, and if their influence is proportional to gains or losses, then regulation tends to maximize social wealth. By contrast, if certain interest groups have influence disproportionate to their size or aggregate stake, they can foist inefficient regulation on society. For example, interest groups that are particularly united and face heterogeneous opposition groups will often obtain legislation that furthers their own interests.³

The essays collected in this volume apply the S-P-P model to state⁴ and federal⁵ regulation of railroads; taxation, regulation, and insurance in the banking industry;⁶ New Deal agriculture;⁷ immigration;⁸ and workers' compensation.⁹ With the exception of a particularly interesting essay by Werner Troesken, which looks both at the market for municipal gas lines and at regulatory responses in that market,¹⁰ the essays generally assume that the family resemblance among various types of regulation is strong enough to support a single general theory. Indeed, one of the strengths of the S-P-P model is its generality. To one degree or another, each essay accounts for the existence of a particular regulatory

3. Interest groups may also wield disproportionate influence when shirking or other free rider problems prevent large groups from making their case effectively, where members of one group have individually higher stakes than members of other groups, or where information failures permit one set of interests to communicate to the legislature more effectively than others. See BUCHANAN & TULLOCK, *supra* note 2; DANIEL A. FARBER & PHILIP P. FRICKEY, *LAW AND PUBLIC CHOICE: A CRITICAL INTRODUCTION* (1991).

4. Mark T. Kanazawa & Roger G. Noll, *The Origins of State Railroad Regulation: The Illinois Constitution of 1870*, in THE REGULATED ECONOMY, *supra* note 1, at 13.

5. Keith T. Poole & Howard Rosenthal, *Congress and Railroad Regulation: 1874 to 1887*, in THE REGULATED ECONOMY, *supra* note 1, at 81.

6. John J. Wallis et al., *The Interaction of Taxation and Regulation in Nineteenth-Century U.S. Banking*, in THE REGULATED ECONOMY, *supra* note 1, at 121; Charles W. Calomiris & Eugene N. White, *The Origins of Federal Deposit Insurance*, in THE REGULATED ECONOMY, *supra* note 1, at 145.

7. Elizabeth Hoffman & Gary D. Libecap, *Political Bargaining and Cartelization in the New Deal: Orange Marketing Orders*, in THE REGULATED ECONOMY, *supra* note 1, at 189.

8. Claudia Goldin, *The Political Economy of Immigration Restriction in the United States, 1890 to 1921*, in THE REGULATED ECONOMY, *supra* note 1, at 223.

9. Shawn E. Kantor & Price V. Fishback, *Coalition Formation and the Adoption of Workers' Compensation: The Case of Missouri, 1911 to 1926*, in THE REGULATED ECONOMY, *supra* note 1, at 259.

10. Werner Troesken, *The Institutional Antecedents of State Utility Regulation: The Chicago Gas Industry, 1860 to 1913*, in THE REGULATED ECONOMY, *supra* note 1, at 55.

decision or regime by examining the interest groups and legislative behavior that produced it.

An important implication of the S-P-P model is that technical attributes of the regulated market take a back seat to the political process by which regulatory policy is formulated. Indeed, under the S-P-P model one need not even inquire whether market failure in the relevant market required state intervention on efficiency grounds. The advantage of the S-P-P approach to the history of regulation is that it explains both good and bad regulation, for both are products of the democratic political process.

The disadvantage, however, is that the S-P-P approach fails to divide the territory. It tells us little about whether the regulatory enterprise at issue was justified or explained by circumstances other than the political process. Some of the regulation described in this book, such as New Deal orange cartels¹¹ and immigration restrictions,¹² can be adequately explained by interest group theory. Other regulation, such as federal requirements of deposit insurance for banks, is stated by the authors to be inefficient special interest legislation, but the authors do not present that case.¹³ Still other regulation described here, such as federal regulation of the railroads and state or municipal regulation of gas utilities, has traditionally been seen as economically justified.¹⁴ Only the Troesken essay¹⁵ explores at any length the degree to which market failure considerations in the market at hand (municipal gas) explained or justified the resulting regulatory regime.

Neoclassical and even classical economics have had theories of regulation for two centuries.¹⁶ Most of these found regulation appropriate or inappropriate on the basis of factors unrelated to the democratic political process or the struggles of competing interest groups. Indeed, one does not need interest groups or representative voting at all in order to have a theory of regulation with substantial explanatory force. For example, a benevolent dictator immune from all interest groups and lobbying, and concerned only with maximizing the aggregate wealth of society, might regulate some markets while leaving others largely

11. See Hoffman & Libecap, *supra* note 7.

12. See Goldin, *supra* note 8.

13. See Calomiris & White, *supra* note 6, at 145-146.

14. See, e.g., 2 ALFRED E. KAHN, *THE ECONOMICS OF REGULATION: PRINCIPLES AND INSTITUTIONS* 113-171 (1970-71) (natural monopoly justifications for regulation).

15. Troesken, *supra* note 10.

16. Perhaps referring to the traditional model as "neoclassical" is unfair, for the S-P-P model is also thoroughly neoclassical in its basic economics, although the theory is applied to public political markets rather than traditional private markets.

unregulated. She might also vary the types of regulation—for example, by placing price controls in some markets, restricting entry or requiring licensing in others, or requiring the dissemination of certain kinds of information or insurance in others. If the dictator who absolutely controlled this government were a moderate neoclassicist, her regime might end up with a mixture of open markets and regulatory alternatives not unlike the mixture we have today. For example, local phone and electric service might still be price regulated monopolies, with officials instructed to engage in fair rate of return rate making. One might still need a license in order to practice law or medicine, city officials might still limit the number of taxicabs, and processed food labels might still be required to list the presence and amount of certain ingredients. In short, even though the interest group theory of regulation is both popular and powerful, it is hardly the exclusive means for explaining regulation. The interest group theory may explain different amounts of the regulation that we actually have, varying from almost all of it to almost none of it. In economics, a robust literature on market-based optimal regulatory structures exists side by side with the interest group literature on regulation.¹⁷

The neoclassical model is technically indifferent to the underlying political structure, provided that the economy is based on free markets and is concerned with optimal¹⁸ regulatory regimes in markets subject to failure. Both the dictatorship and the democracy might have cost-of-service rate making for local telephone service, assuming current technology, but competition for the sale of corn flakes. What determines the appropriateness of regulation are the structural attributes of the market in question.

By contrast, the S-P-P model is formally unconcerned with whether the regulation is efficient under the circumstances. Someone applying the model need not consider whether declining costs, changes in technology,

17. A very short list of the classics includes KAHN, *supra* note 14; Harvey Averch & Leland Johnson, *Behavior of the Firm Under Regulatory Constraint*, 52 AM. ECON. REV. 1052 (1962); Ronald Coase, *The Marginal Cost Controversy*, 13 ECONOMICA 169 (1946); Frank P. Ramsey, *A Contribution to the Theory of Taxation*, 37 ECON. J. 47 (1927); F.W. Taussig, *Railway Rates and Joint Costs*, 27 Q.J. ECON. 692 (1913). A few of the more important recent contributions include WILLIAM J. BAUMOL ET AL., *CONTESTABLE MARKETS AND THE THEORY OF INDUSTRY STRUCTURE* (1982); STEPHEN BREYER, *REGULATION AND ITS REFORM* (1982); MICHAEL CREW & PAUL KLEINDORFER, *THE ECONOMICS OF PUBLIC UTILITY REGULATION* (1986); JEAN-JACQUES LAFFONT & JEAN TIROLE, *A THEORY OF INCENTIVES IN PROCUREMENT AND REGULATION* (1993); WILLIAM W. SHARKEY, *THE THEORY OF NATURAL MONOPOLY* (1982); KENNETH TRAIN, *OPTIMAL REGULATION: THE ECONOMIC THEORY OF NATURAL MONOPOLY* (1991).

18. That is, Pareto optimal or Kaldor-Hicks superior.

externalities, information failure, or other forms of market failure make a particular regulatory solution preferable to no regulation at all or to some other alternative. Most of the essays in this collection never consider the efficiency question. Further, the S-P-P model applies only with respect to a democracy, or at least to a government that is responsive to interest group pressures and where government officials see their own welfare as depending on their ability to satisfy such constituencies.

The relevance of interest group explanations depends on the efficiency of the political markets in which the regulation is promulgated. If political markets functioned perfectly, the study of interest group process and of technical market failure would yield precisely the same result; that is, regulation would generate the maximizing result in markets subject to failure, and competition would prevail where markets work well.¹⁹ In that case, we would not need an interest group theory to explain regulation, but rather it would be fully explained through a technical understanding of the inputs into the market under consideration. But, as protagonists of public choice models of regulation tirelessly point out, political markets are imperfect and often produce inefficient outcomes. To the extent that the political markets are inefficient, the interest group theory will have explanatory force.

Another, more illustrative, way of viewing the efficacy of interest group explanations is to consider whether the neoclassicist benevolent dictator and the democracy would reach the same regulatory result. If the answer is yes, then the interest group explanation is nothing more than an anecdote about how the democratic state reaches its decision. An interest group war story can be told about every decision a democratic government makes, but that does not make the story more interesting than the decision itself.

Technology, Politics, and the History of Regulation

Given these alternative explanatory models, the historian must consider what to look at: market failure, political failure, or both. As a general matter, the answer has to be both. The S-P-P and neoclassical models offer complementary rather than competing explanations for regulatory policy; neither explains all regulation in all circumstances. The history of regulation is not merely about political process; it is also about

19. This proposition assumes that market failure is the only reason that a perfectly responsive government would regulate. In fact, a democratic government might regulate in order to redistribute wealth or to protect moral or other noneconomic values. For example, limitations on the right to seek an abortion or regulation of race discrimination in housing may not be satisfactorily explained on economic grounds at all.

“technical” factors such as technology, market characteristics, information, and innovation. Neoclassical explanations generally offer far greater insights into the relationship between technical factors and regulation than any study of the political process alone.²⁰

In a democratic system, the political and the neoclassical concerns exist side by side. For example, even supposing that a member of Congress knew absolutely that monopoly-plus-price-regulation was the most efficient mechanism for providing gas lighting or local telephone service, he might nonetheless face powerful interest groups requesting alternatives. He would then have to consider the impact of any decision on his re-election prospects.

The interplay between the models is complicated by the fact that the political process itself is imperfect and only a few issues of economic regulation even reach the voters’ subjective agenda. For example, if two senators from the same state represent precisely the same voting constituency, a perfectly operating political market should yield precisely the same voting records, assuming that both senators wish to be re-elected. In fact the contrary is often true: when states have one senator from each of the political parties, their voting records on regulatory issues are substantially different, much more easily explained by ideology or party affiliation than by voter constituency. Essentially the same phenomenon is true of representatives who have recently taken the election from the other party.²¹

In sum, focusing on political markets does not automatically give us better explanations for regulation than does neoclassicism’s traditional focus on the regulated market itself. Sometimes government officials are motivated by factors other than the wish to be re-elected by reaching the median voter²² or appeasing the most important interest groups. Both

20. Equally important, the history of regulation is also about substantive ideology respecting the distribution of wealth, the perceived need to treat different groups of people fairly, or the need for universal access. Our same benevolent dictator might decide that everyone in her realm ought to have a telephone, even if cost-benefit analysis does not justify providing telephones to marginal users.

21. See MORRIS FIORINA, REPRESENTATIVES, ROLL CALLS, AND CONSTITUENCIES (1974); Keith T. Poole & T. Romer, *Ideology, Shirking, and Representation*, 77 PUB. CHOICE 185 (1993); Keith T. Poole & Howard Rosenthal, *The Polarization of American Politics*, 46 J. POL. 1061 (1984).

22. The median voter principle is simply an observation that a decisive coalition in a one-person-one-vote democracy consists of the median voter plus all voters either to the left or to the right of that voter. For example, the conservative must start from the right and reach far enough to the left to bring in the median voter. The liberal starts from the left and must reach far enough to the right to bring in the same voter. The election then becomes a fight for that median voter. See DENNIS C. MUELLER, PUBLIC CHOICE II 180-182, 278-293 (1989).

differences in ideology and in perceptions about the nature of markets or the robustness of competition account for a large part of the story. For example, The federal deregulation movement which began in the late 1970s and took off during the 1980s was greatly inspired by economic theory questioning the domain of natural monopoly cost-of-service rate making and suggesting a far broader role for bidding competition.²³ The theory was strictly neoclassical, in the sense that it looked at markets rather than the political process in order to determine the appropriate domain and scope of regulation. These underlying changes in theory had at least as much influence on the deregulation of trucking, airlines, cable television, or wholesale electricity than any sudden re-alignment of interest groups. The theory also contributed much to the particular type of regulatory policy that emerged.

The title of this book indicates that it is a history of regulatory policy, as do the titles of individual essays, such as “The Origins of State Railroad Regulation” and “Congress and Railroad Regulation: 1874 to 1887.” But why do the authors rely on the interest group theory of regulation policy so heavily that the neoclassical theory is barely worth mentioning? Most likely because Stigler, Posner, and Peltzman, as well as critics such as Buchanan and Tullock, all wrote after the rise of the modern administrative state and rightfully believed that much of the resulting regulation was “excessive,” in the sense that it could not be justified by traditional market failure criteria. That is, the real bite of interest group analysis is not to explain regulation, but to explain bad regulation, or at least to explain why so much of modern regulation is bad.²⁴

The essays in this book are concerned mainly with the nineteenth century, however, well before the rise of the modern administrative state.²⁵ Public choice explanations of regulation are much less useful when applied to the nineteenth century, when regulation was more exceptional and more likely to be addressed to bona fide market failure. By comparison with any regime during or following the Progressive Era, the United States in the nineteenth century was hardly a heavily regulated country. The common law governed the great majority of business legal

23. *E.g.*, BAUMOL ET AL., *supra* note 17.

24. “Bad” refers to regulation that reduces social wealth in order to favor one or more interest groups. Of course, if one believes that nearly all regulation is bad, then the S-P-P model’s reach is comprehensive.

25. Two of the essays focus in part on the New Deal. Calomiris & White, *The Origins of Federal Deposit Insurance*, in THE REGULATED ECONOMY, *supra* note 1, at 145; Hoffman & Libecap, *Political Bargaining and Cartelization in the New Deal: Orange Marketing Orders*, in THE REGULATED ECONOMY, *supra* note 1, at 189.

obligation, federal power was insubstantial compared with federal power in the twentieth century, and state commitment to private enterprise was very strong. Even in distinctly "public works" segments of the economy, such as highways, bridges, and railroads, private ownership was the rule.

The limited usefulness of public choice theory to explain nineteenth century regulation is consistent with general economic market theory. When economists explain competitive, as opposed to regulated, markets, they generally do not resort to analysis of interest groups or the voting behavior of elected representatives. The technical rules of economics show that competitive markets are efficient. As a result, the simple objective determination that markets are better than governments at determining the price of competitively produced oranges or lumber does not require a political explanation. Clearly, this is not because competitive markets require no state intervention. The entire legal system, including contract and property law, represents state supervision of competitive as well as regulated markets. Rather, the rationale for this duality of treatment is that economists regard competitive markets as generally wealth maximizing and therefore as the status quo, or "default" position, while viewing regulatory intervention as exceptional and requiring justification.

Recognizing that market failure exists in some markets, we must start with the premise that leaving that market alone is not invariably the wealth maximizing alternative. One or more regulatory fixes may make some markets work more efficiently than if they were left to themselves or the common law. Within traditional neoclassical economics, identifying market failure and determining the most efficient fix is a technical problem of understanding high fixed costs, continuously declining costs, networks, externalities, and information failure, among other issues.

Nineteenth century regulators did not have our modern technical apparatus for specifying the conditions of natural monopoly or other market failure, or of optimal regulatory pricing. Indeed, they did not even have a technical conception of marginal cost. But they were still able to pursue optimal regulatory alternatives within the framework that was available to them. Many elements of modern regulatory design, including protected monopoly status, administered prices, universal access, and even willingness-to-pay price discrimination, were already well developed in toll bridge charters at the beginning of the nineteenth century.²⁶

At the same time, political markets in the nineteenth century were often less efficient than political markets today, and there may have been relatively more opportunities for capture. Interest groups were as present

26. See HERBERT HOVENKAMP, ENTERPRISE AND AMERICAN LAW, 1836-1937, at 105-130 (1991).

then as now, and the cost of disseminating information was much higher. Indeed, the “producer advantage” in the political process was undoubtedly greater in, say, 1840 than in 1990. Producers, or the regulated firms, are often thought to capture the regulatory process because producers are less numerous, have greater stakes, and have more homogenous interests than do consumers. In that case, one would expect the nineteenth century to be characterized by a plethora of inefficient anti-consumer legislation. But the actual story is far more complex. For example, the principal consumers of railroad shipping in the midwestern states that first imposed price regulation were farmers, a homogeneous group that has been extraordinarily well unified through most of American history. Further, the farmers were local constituents while railroad stock holders were often out-of-state.

In any event, a conspicuous fact of nineteenth century regulation is that notwithstanding poorly functioning political markets, the nineteenth century had far less regulation than the twentieth. Furthermore, most nineteenth century regulation was justified by neoclassical economic criteria. It tended to be concerned with either natural monopoly, as in the case of toll bridges and railroads, or with the management of risk in an era of economic volatility, as in the case of banking and insurance. The nineteenth century state tended to be so hostile toward regulation that often competitive market structures were permitted to develop, even in markets where the consensus for regulated monopoly today is fairly robust. For example, gas lighting, whose lines formed one of the earliest “hard-wired” municipal utilities, went through a lengthy period in which competing producers were permitted to purchase rights of way and lay their lines under the streets, giving customers a choice among alternatives.²⁷ In the middle of the century John Stuart Mill, hardly a champion of state economic intervention, chided London for permitting competing gas companies to lay multiple lines under the streets when price regulated natural monopoly would have been much more efficient.²⁸

Although intervention in the market by means other than the common law was exceptional, one can still find examples of fairly intrusive regulation. Many toll bridges had monopoly charters, price regulation, and a requirement of universal service; collectively, these requirements made toll bridges roughly the same as the modern utility but without the

27. See *Norwich Gas Light Co. v. Norwich City Gas Co.*, 25 Conn. 19 (1856) (refusing to enjoin second firm from laying competing gas lines; invalidating monopoly grants from both state and municipality); HOVENKAMP, *supra* note 26, at 115; Troesken, *supra* note 10.

28. JOHN STUART MILL, *PRINCIPLES OF POLITICAL ECONOMY* 143 (1848 & 1926 reprint).

daily agency oversight.²⁹ Blacksmiths, textile mills, and other manufacturers did not obtain similar protections. To be sure, the historian can always conduct an interest group analysis to determine why toll bridge operators were successful in obtaining monopoly grants protecting them from competition, while textile mills and blacksmiths were not. The results would not be very rewarding, however, even though they might show that legislators from mill towns tended to look favorably at legislation protecting millers from competition, or that legislators representing substantial constituencies of toll bridge users wished to protect their voters from high tolls. There is little reason for thinking that toll bridge owners were better organized than textile mill owners. In any event, they were certainly not better organized everywhere. But these were state-regulated markets, and the outcomes described above were more or less the same from state to state. The reason toll bridges and later lighting utilities received monopoly charters and price regulation, while textile mills and blacksmiths did not, has much more to do with the economic markets for toll bridge and lighting services than with the political markets in which those regulatory decisions were made.

Within the nineteenth century framework for regulation, the decision to give a toll bridge a price regulated monopoly was technical in the sense that it rested on an objective judgment that the market at issue was subject to failure. Fixed costs were very high and a single bridge was virtually always sufficient to carry all the traffic, so the construction of multiple bridges would be socially wasteful. Furthermore, in an unregulated natural monopoly market, prices would have been forced down to variable costs without leaving enough to pay fixed costs. By contrast, textile production seemed to be competitively structured and there was no obvious need to deviate from the normal regime in which the market determined entry, spacing, and pricing.

So when the historian considers why the nineteenth century problem of charter monopolies attended toll bridges, toll roads, canals, gas lighting, and railroads, but not textile mills, blacksmiths or haberdasheries, the fundamental neoclassical economics of optimal regulation should be the dog and the interest group theory should be but the tail. To be sure, the latter could still be very important. It could explain why one particular regulatory design was chosen over other alternatives. It could also explain "bad" regulation, including regulation of markets that did not require regulation, or the failure to regulate

29. See HOVENKAMP, *supra* note 26, at 105-169, 199-206.

markets that should have been regulated.³⁰ But any approach to regulatory history that looked only at the public interest questions, without addressing the fundamental design questions, would be missing the most important aspects of nineteenth century regulation.

Concededly, nineteenth century legislators had about the same incentives to listen to lobbyists as legislators do today.³¹ They presumably wished re-election. A nineteenth century representative contemplating alternative regulatory provisions might do one of two things. First, he might listen to competing interest groups stating their interests and concerns, determine which alternative would do the most good or least harm to his re-election chances, and vote accordingly. Alternatively, he might rely on all available information, including both political and “technical” information about the market, to select the regulatory alternative was the most realistic fix for the perceived market failure at hand. The nature of the response undoubtedly varied from one legislator to another and from one situation to another.

More importantly, the nature of the response varied with the clarity of the alternative inputs. A broad consensus that market failure existed in a certain market was more likely to yield regulation than was ambiguity or uncertainty. Likewise, if interest group pressure was unambiguous and strong, such that a legislator could easily perceive a re-election impact, then interest group pressure would very likely influence the outcome. By contrast, if interest groups were poorly defined or divided, or if a legislator suspected that groups that were poorly represented among lobbyists might speak with a louder voice at the polls, then the legislator would discount accordingly. The public choice theory of legislation certainly tells us that producer groups, to take an example, are more unified and more effective lobbyists for their position than consumer groups are for theirs. But almost every legislator who has survived re-election probably already knows that and takes it into account. At least in those cases when the political market speaks without a clear voice, then, technical or “objective” judgments about optimal regulatory design tend to have a larger presence in regulatory decision making.

30. Also important is a corollary: the state’s refusal to regulate a market subject to failure may also have a special interest explanation. It may explain, for example, the numerous instances when utility companies were appropriately given monopoly charters but then remained free to set their own rates.

31. However, professional lobbying was frowned upon and much more strictly controlled. See HOVENKAMP, *supra* note 26, at 123-124.

By far the most problematic market in the nineteenth century was the railroad.³² The right-of-way and track portion of the railroad seemed to be a natural monopoly. That is, once a track was built between two points it was generally capable of carrying all the traffic, so a second line would be wasteful. At the same time, however, these natural monopoly characteristics tended to diminish as the route became longer. One shipping between two towns fifty miles apart probably faced a single railroad choice. By contrast, one shipping from New York to San Francisco and indifferent to whether the shipment went through Chicago or St. Louis could select from numerous alternative routes. At the same time that the railroads had substantial fixed costs, however, they also had much higher variable costs than wooden toll bridges or plank toll roads. As a result the traditional mechanism of price regulation—placing the rates in the corporate charter—proved too inflexible. This combination of substantial fixed costs and changing variable costs first exposed states to the modern problems of public utility pricing.

The fundamental neoclassical economics of the nineteenth century railroad generally offers a better explanatory model for railroad regulation than the interest group theory, although interest group considerations certainly cannot be ignored. At the very least, any study of the interest group politics respecting railroad regulation must begin by looking at the neoclassical contours of the problem—that is, at the market for railroad services rather than at Congressional or state legislative political markets.

This book contains two essays on railroad regulation. One concerns state regulation and notes the predominant public concern with high prices and the fairly consistent railroad opposition to state regulatory intervention.³³ Perhaps its most interesting conclusion is that in Illinois, support for regulation was weaker in districts where railroads had not yet developed extensively than in districts where they were deemed adequate.³⁴ To the extent regulation deterred entry by reducing the prospect for profit, those in underdeveloped districts feared that aggressive regulation would leave them with no railroad service at all. As Kanazawa and Noll observe, this conclusion is consistent with the theory that state regulation was intended to expropriate railroad capital by giving railroads a return sufficient to cover variable costs, but insufficient to provide a competitive rate of return on invested capital. Apparently the scheme was that undeveloped areas would induce railroads to enter through a

32. For that reason, the study of railroads has contributed so much to the economic theory of regulation. See HOVENKAMP, *supra* note 26, at 131-169.

33. Kanazawa & Noll, *supra* note 4.

34. *Id.* at 44.

combination of subsidies and freedom from regulation. Then, once the railroad was developed, confiscatory regulation emerged that denied the railroad a profitable return on its now irreversible investment. However, this explanation leaves some questions unanswered. For example, the Kanazawa-Noll account does not explain how railroads could be deceived so many times, leading to gross overdevelopment of trackage by the end of the century.

Alternative explanations seem to provide a better fit. For example, in an era when both capital and labor were scarce, not every profitable railroad could be built immediately. Municipalities had to queue up for railroads, and that explains why they offered such substantial incentives.³⁵ Any amount of regulation might induce a railroad company to build first in areas promising no regulation, where returns would be higher, and then perhaps enter areas promising lower, but profitable, returns later. The result would be that undeveloped areas in a regulation state would have a longer wait for a railroad than undeveloped areas in a non-regulation state.

The second essay is about federal regulatory intervention, which the railroads generally sought.³⁶ The basic problem for regulatory design was that the states had jurisdiction only over short hauls, which tended to be monopoly routes with very high rates.³⁷ By contrast, under prevailing commerce clause doctrine the federal government had jurisdiction only over long hauls,³⁸ which were characterized by excessive competition brought about by severe overdevelopment.³⁹ The problem with both essays on railroad regulation is that by focusing on voting behavior in legislative bodies but ignoring the basic economics of the railroad web, the authors pick up only a small part of the whole.⁴⁰ Optimal regulation

35. See, e.g., *Loan Assoc. v. Topeka*, 87 U.S. (20 Wall.) 655 (1874) (condemning municipal subsidy for railroad bridge); *Gelpcke v. City of Dubuque*, 68 U.S. (1 Wall.) 175 (1864) (approving municipal subsidy for railroad financed through bonds).

36. Poole & Rosenthal, *supra* note 21. On the railroads' active solicitation of federal regulation, see GABRIEL KOLKO, *RAILROADS AND REGULATION 1877-1916* (1965).

37. See *Wabash, St. L. & Pacif. Ry. v. Illinois*, 118 U.S. 557 (1886). A short haul is an intrastate haul. A long haul is an interstate haul.

38. See, e.g., *United States v. E.C. Knight Co.*, 156 U.S. 1 (1895).

39. See Herbert Hovenkamp, *Regulatory Conflict in the Gilded Age: Federalism and the Railroad Problem*, 97 *YALE L.J.* 1017 (1988).

40. Thomas M. Cooley, a prominent treatise writer and one of the nation's first railroad regulators, realized the problem already in 1883:

What is a fatal impediment to its control by law is, that the States and the nation have . . . a divided power; and while it is for the interest of the nation at large to encourage the competition which favors long hauls, it is for the interest of localities to make competition most active in short hauls. A State is therefore likely to favor legislation which

of the railroads was not possible as long as no single sovereign had jurisdiction over the entire system.

Conclusion

Ronald Coase once chided economists for assuming a monopoly explanation for phenomena they did not understand, when further study would likely reveal competitive explanations with equal force.⁴¹ Coase was speaking about explanations for the behavior of firms, not of government regulators, but his words are equally apt. Many of the essays in this book commit a similar fallacy, but with respect to governmental intervention. Too often they assume that the regulatory regime under examination must have a political or special interest explanation, and that this explanation makes any search for underlying, technical reasons for regulation uninteresting or unimportant.

While these essays contain many useful insights, most provide only an incomplete picture of the regulatory expedition at hand, because the reader is told so little about the non-political rationales for regulation. A more coherent theory of the history of regulation would certainly acknowledge the omnipresence of political concerns. But they are frequently ambiguous or indeterminate. Likewise, technical concerns for market failure are often present, but their strength and clarity also vary from one situation to the next.

How best to explain any particular regulatory regime is largely a function of which voice speaks loudest and with the least ambiguity. When technical concerns are clear and relatively uncontroversial, as in the case of toll bridges, these concerns give the resulting regulatory regime its

compels proportional charges, or something near such charges, for all distances; but this, if it should be adopted and enforced, would preclude the great through lines of New York and Pennsylvania from competing at Chicago, St. Paul, and St. Louis in the grain-carrying trade of the Northwest, and would reduce such links as are wholly within a State, to the condition of mere local roads, compelled to make high charges or go into bankruptcy.

Cooley, *State Regulation of Corporate Profits*, 137 N. AM. REV. 205, 215 (1883).

41. Ronald Coase, *Industrial Organization: A Proposal for Research*, in 3 ECONOMIC RESEARCH: RETROSPECTIVE AND PROSPECT (V. Fuchs ed., 1972), reprinted in RONALD COASE, *THE FIRM, THE MARKET AND THE LAW* 57, 67 (1988).

[I]f an economist finds something—a business practice of one sort of other—that he does not understand, he looks for a monopoly explanation. And as we are very ignorant in this field, the number of ununderstandable practices tends to be rather large, and the reliance on a monopoly explanation is frequent.

Id.

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basic shape, although politics affects the details. By contrast, when technical concerns are more ambiguous, as they were for the emergent railroad problem of the nineteenth century, then politics finds a much stronger role. As markets are more robustly competitive, the economic case for regulation disappears and the historical fact of regulation must be explained on political grounds.

