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Rent Seeking Never Stops

An Essay on

Telecommunications Policy

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JAMES A. MONTANYE

Changes in U.S. telecommunications policy over the past two decades, culminating in the Telecommunications Act of 1996, have come to be regarded as the triumph of economic reason over regulatory chaos, whim, and incoherence. The trend away from central planning and control, and toward primary reliance on the market process, is consistent with a basic tenet of economic theory—that the market process provides the incentives for individual producers and consumers to make optimal use of price information, and so enables them to maximize the value inherent in telecommunicating. Less apparent is the direction of causality. Does regulatory change reflect a shift in government's regard for the principles of economics or, alternatively, is change the consequence of economic forces that government cannot control through status quo regulatory practices?

I shall argue in support of the latter conjecture, showing how telecommunications policy has been driven by the rational self-interest of government decision makers and how these interests have been constrained both by conflicting interests at different levels of government and by the private incentives of telecommunications users and entrepreneurs to make efficient use of technology by pushing the limits of restrictive regulatory

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policies.

The essay begins with a consideration of conventional theories of regulation, emphasizing their inability to explain and predict the changes in telecommunications regulation that have occurred in the United States. Next, I introduce an alternative and more powerful theory of regulation, rooted in Public Choice analysis. Then, I describe pivotal changes in regulatory policies toward the telephone industry and interpret them in the light of this theory. (Only passing reference is made to broadcast regulation, a subject already explored in this context by several scholars.)¹

Theories of Regulation

Several single-prong theories have been proposed over the years to explain the nature, function, and evolution of regulatory policies. Many of these have been offered as theories of telecommunications regulation. On close inspection, however, none of these theories, whether taken alone or in combination, adequately explains and predicts the course of telecommunications policy in the United States. These theories fail for many reasons. Some of them merely describe trends and events, whereas others consist of ethical notions about what regulation ought to accomplish and how it ought to be imposed. Most theories fail to account fully for the self-interest of government decision makers (politicians, bureaucrats, and judges), and few explicitly recognize the role of technological change and market forces as determinants of policy choice.

A successful theory of telecommunications regulation not only must account for the interest of decision makers and the role of technological change but also must integrate these forces in a rational and positive manner. A theory of regulation rooted in the principles of Public Choice theory can meet these requirements.

Conventional Theories of Telecommunications Regulation

Conventional theories can be divided into two groups for discussion: “public interest” theories; and political and economic theories. These theories are presented in several authoritative telecommunications texts,² and form the

1. See, for example, Coase (1959), Levin (1980), Hazlett (1990), Besen and others (1984), Ray (1990), and Krattenmaker and Powe (1994). The history related by these authors is consistent with the thesis that regulatory policies have been driven by the private interests of politicians, bureaucrats, and judges and, therefore, further belies the general notion that “public” interest considerations have been the force behind telecommunications regulation in the United States.

2. See, for example, Owen and Braeutigam (1978), Brock (1981), and Wenders (1987). More general discussions are given in Wilson (1980), Derthick and Quirk (1985), and Hawkins and Thomas (1989).

basis for popular and scholarly discussions of policy development and regulatory change.

The Public Interest Theory of Regulation

The Public Interest theory presumes that government decision makers are benevolent and omniscient and that laws and administrative rules represent honest, narrowly focused attempts to benefit consumers or to maximize some aggregate measure of social welfare. On this view, regulation is intended to prevent the pricing, output, and distribution problems caused by natural monopoly and other market imperfections. It does so by replacing the unfettered market process with rules such as earnings constraints and common-carrier responsibilities. Proponents of the Public Interest theory (and approach) sometimes acknowledge that regulation does not protect either the “public” interest or the specific interests of individual consumers as effectively as intended. They assert, however, that more desirable outcomes could be achieved if only regulations were more numerous and invasive, and if only enforcement efforts were increased.

The Public Interest theory of regulation plays well in public forums by virtue of its appeal to ethical and populist notions of fairness and equity. However, the theory is regarded as naïve by analysts who focus on the many drawbacks of regulation, including substantial direct costs and deadweight economic losses;³ dubious “public” benefits; and evidence that regulation is a demonstrably poor substitute for the market process in constraining costs and prices and achieving optimal service and innovation. Economists in particular emphasize that the information needed to regulate in a rational manner simply is not available to regulators (Stigler 1975; Hayek 1988).⁴

Political and Economic Theories of Regulation

Political and economic theories acknowledge that regulatory policies

3. Historically, these burdens have been substantial, but they have declined recently in step with regulatory reform. The National Telecommunications and Information Agency (NTIA 1987) estimated the annual direct cost of telephone regulation in the United States to be \$8 to \$10 per local exchange line, about \$2 of which was attributable to federal regulation. NTIA (1981) estimated the “deadweight” loss from the interstate toll-to-local subsidy to be about \$1.6 billion annually. Wharton Econometrics (1986) estimated the indirect cost of the interstate toll-to-local subsidy to be about \$50 billion in forgone GNP growth and 77,000 to 111,000 new jobs forgone between 1984 and 1991, all in addition to adverse consequences for state and federal tax revenues and the U.S. trade balance.

4. These concerns notwithstanding, the Public Interest theory of regulation is an implicit assumption of the economic literature on optimal telecommunications pricing under regulation. See, for example, Brown and Sibley (1986), Wenders (1987), and Mitchell and Vogelsang (1991). Absent a “public interest” assumption, the mathematics of optimal pricing become irrelevant, and little is left to write about.

turn on more than the supposed wisdom and benevolence of public officials. Even so, a bit of Public Interest theory remains in many of these perspectives. A few theories—some associated with particular authors, others generic—recur in the literature on telecommunications regulation, and these are summarized next. This summary is not exhaustive, but representative and fairly encompassing.

The Status Quo theory (Owen and Braeutigam 1978). The purpose of regulation is to moderate the ebb and flow of wealth redistribution between consumers and producers. Regulation's failure to react swiftly and efficiently to changing conditions actually is an example of regulation's performing its intended function. A variation of this theory posits that the purpose of regulation is to buffer and balance the avarice of public utility firms against the confiscatory tendencies of majoritarian democracy.

The Mediation theory (Baldwin 1975). Producers and consumers desire an independent third party to mediate and arbitrate on-going transactions. Regulation plays this role by providing a forum, ground rules, and referees.

The Social Contract theory (Goldberg 1976). Regulatory authorities act as consumers' agents by negotiating and administering long-term contracts with suppliers. Many of the regulatory initiatives introduced at the state level during the 1980s bore the "social contract" label. These initiatives typically focused on deregulation and "incentive" measures, however, and so were unrelated to the Social Contract theory.⁵

The Economic theory (Stigler 1971; Peltzman 1976). Interest groups "demand" (and bid competitively for) regulations that foster strategic objectives. Government "supplies" (sells) regulation in exchange for political capital, votes, private-sector jobs, and other rewards. Regulatory policies favor the highest bidders.

The Capture theory. Regulation is introduced in a public-interest vein, but subsequently becomes the captive of special interests. When regulation is captured by the industry being regulated, it becomes a form of cartel management. Capture theory is a forerunner of the Economic theory of regulation.

The Taxation theory (Posner 1971). Regulation is an extension of

5. Telecommunications reform adopted in 1987 by the Vermont legislature and implemented by the Department of Public Service actually was styled as a negotiated contract between New England Telephone and the state of Vermont, and so paralleled the Social Contract model quite closely. Vermont was unique in this regard.

the “tax and spend” business of government. It is used to redistribute wealth in ways less likely to be countenanced if attempted through visible legislation.

Each of these theories describes some observable aspects of telecommunications regulation, but no theory adequately explains or predicts the policy changes in the United States during the last two decades. On the one hand, regulation has perpetuated the status quo by delaying both the introduction of new technology and services and the entry of new suppliers. Continued regulation in the absence of natural monopoly or serious market imperfections suggests some fundamental demand for regulatory services. The fluidity with which professionals rotate their employment among regulatory, legislative, legal, consulting, and corporate venues is consistent with the doleful predictions of the Capture and Economic theories. Cross-subsidies are consistent with the Taxation theory.

On the other hand, none of these theories adequately explains some critical aspects of telecommunications policy. Contrary to the predictions of the Economic and Capture theories, regulatory policies frequently placed the resourceful and politically powerful telephone companies at a competitive disadvantage vis-à-vis their entrepreneurial rivals. The burden of cross-subsidization was borne mainly by a relatively small number of high-volume toll (long-distance) consumers, while the benefits were spread across the politically unorganized body of residential exchange subscribers—exactly the reverse of the dispersed burdens and concentrated benefits predicted by the Economic theory. The Taxation theory is undermined by the fact that the first telecommunications services to be opened to competition were those that had been taxed most heavily by regulation. And none of these theories predicts that a regulatory agency would adopt reforms that reduce its scope of authority and responsibility.

The shortcomings and contradictions of conventional theories indicate the need for a more powerful theory.

Public Choice Theory

In a general sense, each of the theories just identified is a theory of “public” (or “collective” or “social”) choice to the extent that each attempts to explain and predict the course of government policy. More narrowly, however, a central core of principles constitutes a formal theory of Public Choice, which can be described as “the economic study of nonmarket decision making, or simply the application of economics to political science” (Mueller 1989, 1). Beyond this core, Public Choice splits into various schools, each emphasizing a particular subset of principles in order to answer specific kinds of questions.

My focus is on “rent seeking” (essentially, the pursuit of benefits created by government favoritism) and its relationship to telecommunications regulation. This focus, associated most closely with the Virginia School of Public Choice, uses constructs of positive economics to explain the process of nonmarket (public) decision making and to predict the course of policy choices. The approach explains policies in static terms by relating them to the private utility function of government decision makers, and explains the dynamics of regulatory process by relating change to the conflicting interests and changing opportunities of decision makers.

Public Choice Theory and Decision-Making Incentives

A fundamental premise of Public Choice theory is that all government decision makers—legislators, bureaucrats, and judges—have private interests that may be furthered by the regulatory process. This view of regulation parallels Adam Smith’s (1776) well-worn observation that “[i]t is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard for their own self interest.” Smith’s insight is projected into the realm of regulation with just a bit of rewording: it is not from the benevolence of the politician, the bureaucrat, or the judge that we expect our regulatory policies, but from their regard for their own pecuniary, moral, ethical, aesthetic, and political self-interest. The point of this wordplay is to emphasize that regulators, like all individuals, place positive value on their own interests. This hard-headed view of regulation often meets with resistance, notwithstanding an abundance of corroborative empirical and anecdotal evidence. For purposes of theory building, however, the private interests of regulators must be taken explicitly into account.

The self-interest of regulators consists of a utility function comprising several variables: desire for reelection or reappointment to office; alternative career opportunities; other remunerations, such as travel, honoraria, campaign contributions, and side payments; administrative budget maximization; personal self-esteem, power, prestige, and privilege; private satisfactions that come from shaping the world according to personal preferences; and the pleasure that flows from doing the kind of cerebral, white-collar work that regulation involves. Accordingly, Public Choice theory views politicians and bureaucrats as entrepreneurs, and political parties as business organizations that produce economic rewards for their creators and patrons (Buchanan and Tullock 1962). Laws and regulations are viewed as aspects of contracts between public decision makers and private factions (Landis and Posner 1975).

Judges are somewhat removed from these base incentives, because of the greater individual responsibility and accountability attached to legal decisions and, for the federal judiciary, their lifetime tenure. Even so, judges

derive private utility by reshaping legislation and administrative decisions and otherwise transforming society in ways that satisfy personal moral, ethical, cultural, and political preferences (Berger 1977). One need not deny that judges also may derive utility from deciding issues within established legal constraints (Posner 1995). One merely recognizes explicitly that the utility function of judges is complex—more so than tends to be acknowledged.

As predicted by the Economic theory of regulation, regulators capture private benefits by providing—and by promising and threatening to provide—redistributive rules (Stigler 1975; McChesney 1987 and forthcoming). These benefits are termed “rents,” and their systematic pursuit “rent seeking” (Buchanan, Tollison, and Tullock 1980).⁶ Regulatory rents are created whenever regulators use the power of the state to fetter the market process and thus redistribute wealth among competing parties. Wealth redistribution can be effected in many ways, including those described by conventional theories of regulation: taxation; status quo maintenance; prospective employment; and so forth. Where the self-interest of regulators dominates the decision-making process, regulatory policies are consistent with the “public” interest only to the extent that private and public interests happen to coincide—that is, by coincidence.

Government’s ability to generate rents creates an inherent bias toward regulation. The market process, the alternative to regulation, is less attractive because it dissipates the portion of producer surplus captured as decision-making rents. Although the unfettered market process usually creates a larger economic surplus than does regulation, the surplus can be converted into rent only through visible taxation, an obvious drawback that constrains rent potential and, therefore, favors direct regulation. If regulation did not create rents, its continuation would have no value apart from Public Interest objectives that, because of information limitations, are unlikely to be achievable in any event.

The ability of decision makers at all levels of government to capture decision-making rents by taking and redistributing private wealth has grown substantially during the twentieth century. University of Chicago law professor Richard Epstein (1985) characterizes this “taking” power as follows:

In instance after instance the Court has held state controls to be compatible with the rights of private property. The state can now rise above the rights of the persons whom it represents; it is

6. More generally, a “rent” is a gain that accrues to the owner of property rights whose supply is fixed. A common example is the price premium collected by monopoly suppliers of goods and services. My focus is on the rents that flow from the monopoly of decision-making authority vested in regulators.

allowed to assert novel rights that it cannot derive from the persons whom it benefits. Private property once may have been conceived as a barrier to government power, but today that barrier is easily overcome, almost for the asking.... Under the present law the institution of private property places scant limitation upon the size and direction of the government activities that are characteristic of the modern welfare state. (x)

The increasing authority of government to take and redistribute wealth has caused government at all levels to redefine its role in redistributive terms, as documented by Lowi (1979), Peltzman (1980), Tullock (1986), and many others.

Regulatory rent seeking creates a myriad of economic burdens in addition to the administrative costs and the losses associated with market distortions. In a rent-seeking environment, private factions expend resources for lawyers, lobbyists, consultants, and others, in an attempt both to capture regulatory rents for themselves and to protect against predatory rent seeking by others. When rent seeking is successful, adversely affected groups expend resources to circumvent the arbitrary restrictions that give rise to their burdens. Although such activity is privately rational, it is socially wasteful (Posner 1975; Bhagwati 1982). It is also a natural consequence of representative democracy. Vesting decision-making authority in selected individuals creates property rights that those individuals, as rational utility maximizers, have an incentive to allocate in ways that increase personal utility. In other words, rational decision makers can be hypothesized to act in ways that maximize the value inherent in the private right to decide public issues.

Cooperative action among regulators can increase decision-making rents. However, differences in the utility functions of decision makers at, and within, the different levels of government foster competition that prevents decision-making rents from being jointly maximized. Federal judges, for example, operate outside the legislative and regulatory process, and so their utility functions differ from (compete with) those of legislators and public utility regulators. Differences of this sort also exist between state and federal decision makers. Within regulatory agencies, differences exist between commissioners and staff professionals (lawyers, economists, accountants, and engineers). The hierarchical structure of government implies that regulatory policies are determined in part by the pulling of rank—legislatures trumping courts, courts trumping regulators, federal regulators trumping state regulators, and commissioners trumping staffers. Majority voting rules at all levels of government permit coalitions of decision makers to trump minority interests.

Rent-seeking incentives give rise to regulatory policies that appear (at least from a distance) to be arbitrary and incoherent. A decision-making majority can, in theory, adopt virtually any conceivable policy, given plausible assumptions and circumstances (Mueller 1989). This understanding has led political scientists, economists, and an increasing number of judges to dismiss the importance of “intent” when interpreting statutes and regulatory rules, not only because the rules are likely to be self-serving but also because of the ease with which underlying documentation can be distorted and falsified (Farber and Frickey 1991).

Regulation, Monopoly, and Competition

Private industry, like government, may have good reasons to prefer regulation to the market process. As a rule, no industry offered the opportunity to be regulated as a public utility should decline it and, historically, few have done so (Owen and Braeutigam 1978). Regulation offers protected markets; freedom from irksome competitors, demanding customers, and annoying antitrust constraints; and reduced business and financial risks. Regulated firms are in a unique position to capture pecuniary and nonpecuniary rents that would be bid away by unfettered competition. In short, regulation offers “the good life” to industries and firms that play the regulation game effectively. Accordingly, industries have an incentive to strive for regulation and, upon attaining it, to cooperate with regulators in ways that increase the regulatory rents captured by both factions. The result is akin to the cartelization of any industry, except that regulators use the coercive power of the state to manage the cartel.

As in any cartel, members of a regulatory cartel often discover opportunities to benefit themselves at the expense of their partners. Regulated firms find opportunities to capture profits in ways that regulators would disapprove, and so firms become selectively economical with information. Regulators find opportunities to build political capital by heckling and coercing firms. Possibilities for opportunistic behavior prevent a cartel from maximizing the joint rent over the long run. So long as a modicum of discipline and trust is maintained, however, regulation generates rents for government and industry factions and continues until perturbed by outside forces.

Entrepreneurs too have an incentive to support regulation, at least for other firms if not for themselves. They profit by selling into the gaps between supply and demand created by regulatory restrictions, and by using the machinery of regulation to hamstring competitors and to resolve disputes between themselves and regulated firms. Regulation facilitates business practices that otherwise would be actionable under antitrust law: tariff requirements, for example, allow price coordination and limit price shading.

Whether an entrepreneurial firm seeks to join a regulated cartel or,

alternatively, to remain apart from it, depends on which alternative maximizes the present value of the expected profit stream, a matter that changes as regulatory policies and market conditions change. On the other side, a regulatory cartel will admit new entrants only if doing so maximizes the present value of expected future rents. If entry is inherently unsustainable, or if it appears that entry can be made unsustainable by means of strategic regulatory action, then a rational cartel will seek to crush entrants rather than taking them to its breast. Hence, entrepreneurs must enter regulated markets by force, pushing the legal limits of restrictive regulation until a suitable market niche is created. Entry under these conditions is costly and so is best attempted during periods of rapid technological change, when marginal costs are falling and product improvements are possible. These factors allow entrepreneurs to generate the cash needed to bear the burdens of litigation and political action and the high risk of failure.

Where entry is sustainable in the long run, the market process dissipates regulatory rents until status quo regulation is no longer worthwhile. At this juncture, regulation passes through a reformation that marks the end of one regulatory cycle and the beginning of another.

Telecommunications Policy in the United States

In this section of the essay, I sketch the trend of regulatory policy, focusing on key regulatory episodes involving telephone equipment and long-distance services. The purpose of this account is to show how policy change, including the antitrust divestiture of AT&T in 1984 and the Telecommunications Act of 1996, agree with the predictions of the positive theory of regulation developed above. I shall describe how the telephone industry evolved from an initial state of competitive chaos to become a regulated monopoly that benefited the industry and its regulators for nearly seventy years. As regulatory rents grew, entrepreneurs and consumers increasingly pushed the limits of regulatory restrictions. They were aided at key points by federal courts, which operated outside of the regulatory cartel and decided pivotal regulatory issues by their own lights, and by public utility regulators and legislators at different levels of government, whose divergent utility functions caused them to act at cross-purposes with one another. Formal moves toward regulatory reform occurred only after the capacity of regulation to generate sustainable rents had been substantially eroded. The Telecommunications Act of 1996 completed a cycle of creative destruction and laid the groundwork for a new cycle of rent seeking.

Some Early History

The factual history of telephony in the United States is well documented.⁷ The telephone industry began chaotically, with many firms competing to provide basic exchange service. The unwillingness of competing carriers to connect their systems meant not only that customers had to subscribe to the services of more than one carrier but also that the first carrier to acquire a critical mass of subscribers could buy out its competitors.

A key development in telephony was the introduction of long-distance service by the American Telephone and Telegraph Company (AT&T).⁸ Long-distance service was especially valuable and therefore drew customers to the exchange carriers connected to AT&T's long-distance network. By refusing to connect rival exchange carriers, AT&T eventually consolidated the local exchange industry under its ownership. The justification for this consolidation—as articulated by AT&T's turn-of-the-century president, Theodore Vail—was the need for “one system, one policy, [and] universal service.” Despite Vail's rhetoric, AT&T's consolidation of the industry raised antitrust concerns. By the time these issues came to a head, AT&T controlled exchange operations in the country's largest markets. In 1913, AT&T deflected antitrust action by promising to stop acquiring competitors and to begin connecting them to the long-distance network—the so-called Kingsbury Commitment. As a result, the clamor for antitrust action faded, and AT&T retained its portfolio of exchange companies. At the time of its divestiture in 1984, AT&T supplied roughly 85 percent of all exchange lines in the country through its ownership of the Bell System. The remaining 15 percent were supplied by roughly 2,300 “independent” carriers that varied greatly in size and geographic scope.

With long-distance connection available for the asking, and with its telephone patents expiring, AT&T again faced the problem of independent carriers nibbling at its business. When AT&T was a *de facto* monopoly, protected by patents and a proprietary network, it staunchly resisted government regulation. As competition for exchange customers increased, AT&T reversed its position and embraced regulation on the grounds that telephony was a natural monopoly, and that AT&T was the single entity best able to manage the monopoly in the public interest.

The high visibility and growing importance of telephony made the industry an attractive target for regulation by the Progressives, who viewed big business with great suspicion. AT&T and the telephone industry struck a

7. See, for example, Brooks (1975), Meyer and others (1980), Brock (1981, 1994), von Auw (1983), and Coll (1986).

8. Switched long-distance service goes by many generic names, including “toll,” “inter-exchange,” “interLATA,” “message toll service” (MTS), “message telecommunication service” (MTS), and “wide area telecommunications service” (WATS). Nonswitched services typically are called “dedicated,” “point-to-point,” and “private line.”

Faustian bargain with state and national regulators, pursuant to which the “natural monopoly” of the telephone industry was recognized and preserved, both in fact and in law. In return, telephone carriers submitted to rate and service regulations designed to ensure industry profitability while preventing carriers from pocketing a full measure of monopoly rents. The partnership of industry and state was symbiotic. AT&T’s local and long-distance monopolies, which no longer could be sustained through aggressive defense of telephony patents and refusal to connect competitors, was sustained by the force of law. Government, in turn, built political capital by imposing “fairness and equity” constraints on the telephone industry. This arrangement remained remarkably stable for roughly sixty years, from about 1910 to 1970.

Throughout most of this period, the telephone industry retained absolute control over connections and attachments to its lines and equipment. This was accomplished by means of tariff language that prohibited “foreign” attachments of all kinds. The restrictions ensured, among other things, that rents could be generated from each dollar of investment in telephonic communications. These prohibitions were passively accepted for many years by telephone subscribers, who had little inkling of the opportunities being foreclosed.

Eventually, cracks appeared in the regulatory shield. Although seemingly trivial and insignificant, they nevertheless provided sufficient openings for entry into telephone equipment and long-distance service markets to occur. Entry gave rise to the creative destruction of status quo regulation.

Telephone Customer Premises Equipment (CPE)

The first crack resulted from the private manufacture and sale of a rubber cup, called the Hush-a-Phone, that slipped over the mouthpiece of a telephone handset. The device mimicked a human hand cupped around the mouthpiece, increasing privacy and reducing background noise. As innocuous as the device was, it nevertheless violated the industry’s prohibition against foreign attachments. AT&T actively discouraged use of the device on the grounds that it was patently unlawful and potentially harmful. Hush-a-Phone Corporation brought the issue before the Federal Communications Commission (FCC), which ruled in 1955 that the device did indeed violate AT&T’s tariffs and, therefore, was unlawful. On appeal, the federal court, seeing by its own lights, overruled the FCC by declaring that AT&T’s tariff restrictions were neither just nor reasonable and, therefore, were themselves unlawful. The court reasoned that such broad tariff restrictions were “an unwarranted interference with the telephone subscriber’s right reasonably to use his telephone in ways which are privately beneficial without being

publicly detrimental.”⁹ By this decision the court imposed its own notions of fairness, equity, and social efficiency on the telephone industry and the FCC.

The Hush-a-Phone precedent opened the door for an inventor named Thomas Carter to market a device, called the Carterphone, that allowed subscribers to connect their telephone service with other telecommunications media, such as mobile marine radio. Such connections permitted them, among other things, to circumvent the expensive long-distance, mobile radio, and ship-to-shore services offered by the telephone industry. The connection was performed acoustically by placing the telephone handset into a cradle that contained a miniature microphone and speaker system. The Carterphone was a foreign attachment within the meaning of AT&T’s tariffs, which proscribed all connections and attachments to the network “whether physically, by induction, or otherwise.” AT&T proclaimed the device to be unlawful and threatened to terminate telephone service to any party caught using it. After nearly a decade of legal wrangling, the FCC ruled, consistent with the Hush-a-Phone precedent, that the restrictive provisions of AT&T’s tariff were “unreasonable and unreasonably discriminatory.”¹⁰

The Hush-a-Phone and Carterphone decisions nullified the industry’s *de jure* monopoly of the connection and use of equipment that posed no threat of physical harm to the telephone network (the issue of “economic” harm had yet to be considered). The regulatory changes wrought by these decisions spawned the connection of customer-owned CPE of all sorts, including plain and fancy telephone sets, complex switching equipment (key telephone systems and private branch exchanges), modems, facsimile machines, alarm systems, and sundry other devices.

The upsurge of customer-owned equipment that followed Carterphone threatened to play havoc with regulatory policies at the state level. The reason lay in the accounting procedures, called “separations and settlements,” by which regulators and the telephone industry shuffled costs and revenues between local and long-distance services and, in particular, between state and federal regulatory jurisdictions (Gabel 1967; NARUC 1971).

In the early days of telephony, accounts of connected carriers were settled by private negotiation and contracts. Settlements compensated carriers for the incremental cost of switching and distributing each other’s telephone traffic. State regulators, who were burdened by Bell System demands for

9. *Hush-a-Phone Corporation v. Federal Communications Commission*, 238 F. 2d 266, 269 (1956).

10. *In the Matter of the Use of the Carterphone Message Device in Message Toll Telephone Service*, 13 F.C.C. 2d 420 (1968).

local rate increases, became concerned that AT&T was using settlement agreements with its Bell System affiliates to concentrate profits in interstate long-distance operations. Interstate costs and rates, which were under Interstate Commerce Commission jurisdiction until 1934, when authority passed to the FCC, were beyond the legal reach of state regulators. For reasons to be discussed shortly, interstate regulators had little incentive to meddle in costs and tamper with rates.

State regulators could see that the cost of providing long-distance service was declining as the result of new technology and scale economies, and could see that interstate toll rates were not declining in step. They also understood that local rate increases could be mitigated if a means were found by which to capture a larger measure of interstate long-distance (toll) revenue than accrued under private settlement agreements. The task facing state regulators was to develop formal separations and settlements procedures that increased the proportion of exchange costs that “reasonably” could be attributed to interstate operations and, therefore, could be recovered from interstate toll revenues.

The plan for apportioning local exchange costs to interstate operations was driven by accounting, rather than economic, considerations. Most telephone plant is used to provide both state and interstate services. Some plant costs (the cost of telephone sets, for example) are “fixed” in the economic sense; that is, they are incurred regardless of whether any calls are placed or received. There is no basis in economic theory for apportioning fixed cost between services and regulatory jurisdictions. Rather, theory teaches that these costs are best recovered directly from the subscribers that cause them to be incurred. In the economic perspective, accounting rules for allocating fixed costs are arbitrary.

Attempts by the states to impose arbitrary separations rules provoked resistance from AT&T and the Bell System. The issue ultimately was resolved by the Supreme Court, which, applying Solomonic wisdom in a literal way, ruled that all exchange operating costs, including fixed costs, must be separated (divided) between regulatory jurisdictions on the basis of usage.¹¹ The separation of variable (marginal) costs on the basis of usage makes sense in economics, but the separation of fixed costs does not. It follows that the court’s ruling was driven either by a faulty understanding of economics or by the judges’ own notions of fairness and equity. In any event, the practical effect of the decision was to drive a de jure wedge between the economic cost of providing interstate long-distance service and the prices that had to be charged for it.

The gap opened by this wedge grew to astounding dimensions over

11. *Smith v. Illinois Bell Telephone Company*, 282 U.S. 133 (1930).

time. When the Carterphone device came to market in 1960, the separations process allocated about 7 percent of fixed CPE costs on average to interstate long-distance operations. This meant that every \$1.00 of fixed cost produced \$0.07 in interstate settlement revenue. This revenue was a regulatory rent that state regulators were free to distribute in whatever manner suited them. For the most part, they used it to mitigate upward pressure on rates for residential exchange service, blending it into an overarching pattern of transfers that redistributed wealth from business to residential subscribers, from urban to rural subscribers, and (by virtue of especially long depreciation periods) from future to current subscribers.

Between 1956 and 1968, when it appeared that the Hush-a-Phone precedent could open the CPE market to competitive supply, the proportion of fixed equipment cost assigned to the interstate jurisdiction increased from 6 percent to 11 percent (Congressional Budget Office 1984). The figure reached 20 percent by 1975, and 27 percent by 1984. Interstate services could shoulder this increase because of falling transmission costs attributable to the increased use of microwave and broadband cable technologies. Separations procedures were adjusted periodically to absorb these cost reductions, in particular by weighting “relative-use” measures to shift a greater proportion of fixed cost to the interstate jurisdiction.¹² Regulators and the telephone industry negotiated these adjustments.

Increasing the interstate assignment of CPE costs suited state regulators because it mitigated pressure for local rate increases. It also suited AT&T and the telephone industry. First, it removed the need for AT&T to reduce interstate toll rates at a time when the Bell System’s local operating costs were rising. Second, it removed the need for the Bell System to petition prickly state regulators for higher exchange rates. Third, it tied settlement increases to the continued provision of CPE by the telephone industry.

In contrast to the separations treatment of industry-provided CPE, the cost of customer-owned CPE was excluded from separation-and-settlements calculations. Consequently, any substitution of customer-owned CPE for industry-owned equipment directly reduced the interstate settlement fund. As customer-owned CPE captured market share—which was certain to happen, because this equipment was cheaper and feature-rich compared to industry-provided CPE—the rent accruing to state regulators would decline.

12. The rationale for the use of weights was rooted in the “deterrent” effect that toll charges had on relative-use percentages. Local exchange services were “flat rated,” meaning that subscribers paid a fixed monthly charge for service and no incremental charge for local calling. In contrast, an incremental charge was incurred for each long-distance call. The tongue-in-cheek rationale behind the weighting scheme was that it approximated the relative-use proportions that would have arisen in the absence of toll charges. Given that the separation of fixed costs according to relative usage lacked a rational economic basis, the use of a weighted separations factor was no less arbitrary.

State regulators, AT&T, and the telephone industry resisted the FCC's Carterphone decision by actively opposing the connection of customer-owned CPE. So strong was this opposition that the FCC asserted primary jurisdiction over CPE policy in 1974 on the grounds that state regulators were frustrating the use of customer-owned CPE for interstate calling. State regulators responded by warning the FCC that its policies would have "a substantial adverse economic impact on local exchange telephone subscribers" (quoted in von Auw 1983, 411).

Long-Distance (Toll) Services

Pressure to liberalize regulatory policies governing the long-distance monopoly stemmed from three sources. First, the procedures for dividing costs between local and long-distance operations caused interstate long-distance service to be priced substantially above economic cost, much to the dismay of parties making a lot of interstate calls. Second, state regulatory policies caused state toll rates to be set arbitrarily high in order to subsidize local exchange operations. Third, newly developed microwave technology made it feasible for private firms to build and operate telecommunications systems.

Private use of microwave technology required the availability of frequencies and the FCC's willingness to grant licenses. AT&T and Western Union, adapting their own networks to microwave transmission at the time, argued strongly against the grant of private licenses on two grounds: the spectrum could not accommodate both common carrier and private systems; and the use of private systems would upset the delicate balance between common carrier costs and revenues and, therefore, threaten the universality of telephone service.

The "scarcity" argument was refuted by a comprehensive study of the available spectrum by the Electronic Industries Association, a trade group representing microwave equipment manufacturers. The argument that private networks would seriously and adversely affect industry revenues was dismissed on the grounds that the demand for private networks would be negligible. Moreover, owners of private networks could be prohibited from sharing and selling slack network capacity in competition with AT&T, and connection of private systems to the public telephone network could be prohibited absent a compelling case-by-case showing that such connection served the public interest.

Equity considerations supported the grant of private licenses. The toll-to-local subsidy meant that customers making heavy use of toll services (both state and interstate) bore a disproportionate share of the subsidy burden. Accordingly, the FCC decided to earmark frequencies for private

microwave use and to grant licenses.¹³ The decision was not seen as opening the long-distance market to competition but, rather, as providing a measure of relief to large firms, including many politically powerful defense contractors.

Entrepreneurs realized that private networks provided an opportunity to capture a portion of the monopoly rent created by regulation. To do so, they needed only to be certified as interstate common carriers. Once certified, regulatory restrictions against the sharing and sale of transmission capacity would become moot, as would restrictions prohibiting connection with the “public” network.

State regulators typically conferred *de jure* monopoly status on certified exchange and long-distance carriers. Federal regulation, in contrast, conferred no *de jure* monopoly on AT&T’s interstate operations, although the Communications Act of 1934 did require prospective entrants to prove that certification would serve the public interest.

The first company to seek certification was Microwave Communications Incorporated (MCI), precursor of the MCI that exists today. An application was filed in 1963 for authority to supply dedicated channels for hire between St. Louis and Chicago. MCI’s stated intention was to provide “specialized” services to customers unhappy with AT&T, which had come to regard its captive customers as demanding nuisances. In contrast, MCI saw these customers as business opportunities. In support of its application, MCI proffered copies of service complaints that AT&T’s customers had lodged with the FCC. These complaints focused in particular on the poor quality of AT&T’s data transmission services—the market niche in which MCI proposed to specialize. After six years of litigation brought by AT&T and supported by state regulators, the FCC voted 4–3 to certify MCI as a “specialized common carrier.” Following another two years of litigation, MCI received authorization in 1971 to begin operations.

MCI’s application ostensibly was approved on its merits. Nevertheless, the application had been made at a propitious time. In 1965, Congress—at the instigation of high-volume users of long-distance services—directed the FCC to investigate AT&T’s interstate operations with an eye toward reducing interstate rates. It quickly became apparent that rational regulation of AT&T was impossible. Not only was the FCC understaffed and under-equipped for the task; it was dependent on AT&T for all of the information needed to regulate. To mitigate the effects of these limitations, the FCC envisioned a scheme of limited competition in interstate services. William Melody, a professor of economics and FCC consultant, first articulated the

13. In the Matter of Allocation of Frequencies in the Bands Above 890 Mc., 27 F.C.C. 359 (1959).

idea in 1968. He presented it as follows:

The Commission could encourage the entry of new common carriers into submarkets the new carriers could supply efficiently.... By following such a policy, the Commission would be using the market force of competition as a regulatory tool in the prevention of monopolistic price discrimination. (von Auw 1983, 124)

The introduction of competition was not intended to be an optimal alternative to regulation but, rather, a tool for forcing AT&T to reveal its economic costs in the form of market-driven prices. The FCC's only alternative was to investigate rates on the basis of engineering cost studies, which AT&T as a regulated firm was able to prepare in superabundance and which, as a practical matter, defied independent verification.

AT&T's control of the numbers was not the FCC's only concern. The carrier's sheer size gave it considerable political leverage and, with that, a measure of arrogance and independence that rankled regulators and legislators at all levels of government. The introduction of limited competition appealed as a way to discipline AT&T and to restore a measure of power and prestige to regulators:

MCI was unleashed, nurtured, protected, and defended by the FCC and [the U.S. Department of] Justice because, in the words of [former FCC Common Carrier Bureau chief] Hinchman's predecessor Bernie Strassburg, "AT&T was getting so big, so fast." Competition was a means for the government lawyers and bureaucrats to wrest power away from AT&T, to regain control over the phone company. Judge Greene [who presided over the government's antitrust case against AT&T], a former government lawyer himself, indicated clearly...that it was AT&T's size and power that troubled him above all. (Coll 1986, 373)

AT&T and state regulators fought MCI's entry with tooth and claw, earning for AT&T a place in the antitrust record books. By refusing to connect MCI's system with the public network and by engaging it in costly litigation, AT&T stunted the demand for MCI's services and dissipated any operating-cost advantages that it might have had over AT&T. Out of necessity and perhaps out of strategic planning, MCI abandoned its plan to provide specialized services and began to compete for AT&T's interstate toll business through an offering called "Execunet." In this market the potential profits were greatest, not only because of its sheer size, but also because of the wedge that regulation had driven between costs and prices. The limited introduction of competition had become a classic slippery

slope.

At the urging of AT&T and state regulators, the FCC ordered MCI to cease and desist immediately on the grounds that MCI had not been authorized to provide toll services. (MCI characterized Execunet as a “switched private line” service in a rhetorical attempt to obscure its true nature.) The matter reached the federal court, which ruled, to the surprise of many, that the FCC’s authority under the Communications Act of 1934 ended with the granting of operating authority.¹⁴ In the court’s narrow and independent view, the FCC lacked authority to dictate the services a carrier could offer once facility construction had been authorized. The Communications Act of 1934 did not contemplate the introduction of limited competition for regulatory purposes. The court’s Execunet ruling ended AT&T’s de facto monopoly over interstate long-distance services and set the stage for the industry restructurings that occurred in 1984 and 1996.

MCI, Sprint, and other entrants remained essentially free of FCC regulation from their inception. Through careful lawyering, however, they used administrative law and due process to hamstring AT&T with regulatory red tape. They used regulation effectively in other ways as well. For example, the FCC exempted these carriers from close regulatory scrutiny, at one point relieving them of the obligation to file and follow tariffs for interstate services. In the absence of tariffs, carriers could practice price discrimination by negotiating terms and conditions with individual customers. Industry profits would be eroded as entrants competed for business. MCI sued in federal court to prevent the FCC from removing tariff requirements. The court, accepting the legal merits of MCI’s argument, determined that the Communications Act of 1934 required all carriers to file tariffs, and therefore reversed the FCC’s decision. The consequent ability of carriers to coordinate prices and control opportunistic behavior facilitated super-competitive toll rates.

Throughout this period, state regulators prohibited MCI and other entrants from providing state toll service in competition with AT&T and the Bell System, thereby protecting the rents that flowed from state regulatory policies. These restrictive policies were mitigated in 1984 by the AT&T anti-trust settlement. Among other things, the settlement divided the country into approximately 160 geographic areas, called local access and transport areas (LATAs), within which the states had jurisdiction over toll services and between which the FCC had jurisdiction. Many states continued to prohibit toll competition within LATAs, a policy finally nullified by the Telecommunications Act of 1996.

14. MCI Telecommunications Corporation, et al. v. Federal Communications Commission, 580 F. 2d 590 (D.C. Cir. 1978).

AT&T Divestiture

Aggressive resistance to competition by AT&T and state regulators hindered entrants desiring to sell CPE and interstate long-distance services. MCI filed a federal antitrust suit against AT&T in 1974, by which time CPE manufacturers and retailers also were preparing antitrust suits. AT&T's competitors also sought to widen regulatory cracks by lobbying Congress and the Justice Department for relief. The Department of Justice brought an antitrust action against AT&T in 1974, seeking in part to divest AT&T of its equipment manufacturing and local exchange operations. The suit, which succeeded in achieving its basic objectives, culminated in a settlement agreement styled as a Modification of Final Judgement (MFJ).¹⁵

The merits of the Department of Justice suit, as well as the provisions of the MFJ, commonly are assumed to reflect the application of economic principles to telecommunications regulation. The basis for this assumption appears in a comment by Roger Noll (1985), a professor of economics and influential commentator on telecommunications policy:

Astonishingly enough, economics played a central role in changing federal telecommunications policy, as acknowledged by Philip Verveer, the lawyer who developed the antitrust case against AT&T, the Chief of the FCC's Cable Television Bureau when cable was deregulated, and the Chief of the Common Carrier Bureau when the FCC formally adopted the policy of minimizing federal regulation of telecommunications. The intellectual foundation of these policies is an economic case that the industry will be more efficient if it is minimally regulated and maximally competitive. (52)

In fact, the "intellectual foundations" to which Noll refers carried relatively little weight in the decisions leading up to divestiture.

The Justice Department's case certainly did not reflect a consensus among economists at the time. Many economists considered the telecommunications industry to be a natural monopoly and, accordingly, reasoned that the facilitation of competition through the atomization of AT&T would create tremendous inefficiencies. Other economists, who regarded a competitive telecommunications industry as inevitable, disagreed with the dives-

15. *United States v. American Telephone and Telegraph Company*, 552 F. Supp. 131 (D.D.C. 1982). The MFJ affirmed the provisions of a settlement agreement reached between AT&T and the Department of Justice in 1981. It was styled as a modification of the Consent Decree, entered in 1956, that settled the 1949 antitrust suit brought against AT&T and Western Electric by the Justice Department.

titute remedy. Lester Thurow (1980), for example, reasoned that

Technological advances will from time to time require changes in the rules of industrial competition. With the development of microwaves and satellites, the long distance transmission of messages may have changed from a natural monopoly to a potentially competitive industry. If so, rules and regulation governing the telephone business should be changed to reflect this development. Whatever should be done, however, the correct answer is not an antitrust suit against AT&T. A regulated monopoly should be governed by regulatory procedures and not by antitrust procedures. If the goal is a competitive industry in long distance transmission, an antitrust case is simply not the means for getting to this objective. Deregulation is best achieved by deregulation, not by a lengthy court case based on principles that have nothing to do with regulation and deregulation. (150)

A Department of Justice consultant similarly questioned the structural remedies being sought (Brock 1981):

Taking an action (such as divestiture) is certainly not free. It imposes substantial legal costs on both sides and substantial managerial burdens for implementation. Insofar as industries are moving in the "right" direction, it may be more economical to allow them to do so than to impose significant changes through government actions. (300-1)

At trial, AT&T sponsored the testimony of several prominent economists, engineers, and foreign telecommunications administrators, each of whom described the proposed divestiture as ill considered. They had a point, as Coll (1986) noted:

Certainly it is true that the government lawyers and bureaucrats at Justice and the FCC were not driven to break up the phone company by any clear, coherent vision about how a decentralized telecommunications system would work better than the existing one. The Justice lawyers, for example, never seriously believed that the operating companies would ever be divested, and until it became a necessity as the case was about to go to trial, they spent very little time drawing up plans for how the nation's phone network would be managed if they won their case. Instead, the government lawyers were driven by the conviction that AT&T was "unregulatable," as Walter Hinchman, the [FCC's] former Common Carrier chief, always put it. (373)

Except for the general notion that competition is preferable to monopoly, economic principles played a small role in the decision to reform the tele-

communications industry through antitrust action.

In the end, the Department of Justice and AT&T agreed on a settlement involving, among other things, the divestiture of AT&T's local exchange (Bell System) operations. Settlement terms were dictated by anti-trust chief William Baxter, a law professor of the "law and economics" school who inherited the case from a line of predecessors. Baxter reasoned that, by separating AT&T's local operating companies from its long-distance operation, by removing toll-to-local subsidies, and by breaking the corporate link that obliged the Bell System to purchase the bulk of its equipment from AT&T's Western Electric subsidiary, the industry could develop more or less naturally along competitive lines.

The presiding judge in the AT&T case, Harold Greene, accepted the settlement agreement and added some key conditions of his own. In particular, he imposed line-of-business restrictions against AT&T and the divested "Baby Bell" companies. These prevented both entities from offering information services. They also prevented the Baby Bells from providing long-distance services between LATAs (which Greene was instrumental in designing) and from designing and manufacturing telephone equipment.

The MFJ's information-services restriction against AT&T carried a "sunset" provision and expired naturally. The restriction against the Baby Bells was abandoned only after protracted litigation. So determined was Judge Greene to keep the restriction in place (even in the absence of a supporting evidentiary record) that the Federal Court of Appeals ultimately scolded the judge for abusing his discretionary authority and remanded his rulings. Judge Greene's concern was that the provision of information services by the Baby Bells would stifle diversity, an ironic "first amendment" argument pressed by the newspaper industry to preclude competition by the telephone industry (Mink 1989).

Many economists viewed the MFJ's long-distance restriction as unnecessary and positively harmful to economic efficiency. By preventing the Baby Bells from competing in long-distance markets, the restriction prevented competition by the very entities best able to challenge the dominant AT&T-MCI-Sprint long-distance oligopoly. There is no compelling evidence that consumers benefited from the long-distance restriction. Rather, it facilitated supercompetitive long-distance charges. It was later nullified by the Telecommunications Act of 1996, as was the manufacturing restriction.

As the government's case against AT&T approached resolution, another federal judge a few doors down the courthouse hall was hearing an antitrust case brought against AT&T by Southern Pacific, the owner of Sprint. This case resembled the government's case against AT&T and was virtually identical to the case that MCI had brought successfully a few years

earlier. It surprised many that in the Southern Pacific case, Judge Richey decided key issues in AT&T's favor and dismissed the suit, casting aspersions at Judge Greene and the MFJ in the process. Judge Richey was a former state regulatory commissioner and, as such, brought a potential conflict of interest to the case. Southern Pacific and AT&T specifically accepted the case assignment to Richey on the grounds that his experience and knowledge of telephony issues uniquely qualified him to hear the case. The regulatory theory of this essay would have counseled Southern Pacific against this acceptance.

Had the government's case against AT&T been assigned to Judge Richey instead of Judge Greene, telecommunications policy would have evolved much differently than it did.

The Telecommunications Act of 1996

Prior to 1996, Congress enacted no telecommunications policy legislation, apart from broadcasting and cable television rules, despite several attempts to do so over a twenty-year period. Early attempts to legislate reflected blatant efforts by the telephone industry and state regulators to subdue competition and maintain status quo policies. Legislative initiatives sponsored in the late 1970s would have obliged every telephone subscriber to accept (and to pay handsomely for) at least one industry-provided telephone set for each local exchange line. Initiatives to codify a telephone industry monopoly arose as the government's antitrust suit against AT&T gathered momentum. Subsequent to AT&T's divestiture, conflicting initiatives were undertaken to codify the MFJ's line-of-business restrictions and, alternatively, to nullify them. Congress's inability to pass telecommunications legislation during this interval revealed both the ability of powerful factions to block legislation and the inability of any faction, no matter how powerful, to get legislation passed.

Initiatives aimed at the MFJ's line-of-business restrictions were a principal focus of lobbying between January 1984 (the date of the AT&T divestiture and the creation of the Baby Bells) and the passage of the Telecommunications Act of 1996 ("the Act"). Long-distance carriers and professional consumer advocates opposed proposals to lift the long-distance restriction. Carriers argued that the Baby Bells had the motive, means, and opportunity to exercise "bottleneck" control over local exchange facilities in order to compete unfairly and therefore should be kept out of the long-distance business. Consumer advocates argued that the Bells would cross-subsidize long-distance operations by hiking rates for monopoly exchange services. Legislative proposals to lift the long-distance restriction consistently failed to garner enough support for passage, notwithstanding the assurance of many economists that market entry by the Bells would cause supercom-

petitive long-distance rates to fall.

Efforts to nullify the MFJ's manufacturing restriction generated more congressional movement, but not because of concern for the efficiency of telecommunications markets. Legislation offered in the Senate in 1991 would have permitted the Bells to design and manufacture telephone equipment if specific "domestic content" requirements were met. This condition was both irrelevant and contrary to rational telecommunications policy. It was consistent, however, with the private interests of trade unions, domestic competitors, and trade bashers. The legislation did not pass, but the episode illustrates the ease with which good intentions can be hijacked at their inception.

The Act nullified the remaining line-of-business restrictions imposed by the MFJ as well as several restrictions imposed administratively by the FCC. The Baby Bells became free to enter long-distance markets (an attractive opportunity given that long-distance markets are growing faster than local exchange markets), to provide cable television services, and to manufacture equipment. The cable industry, in turn, received rate deregulation (yet again) and became free to offer local telephone service, a significant opportunity given that cable service presently is available to about 90 percent of U.S. homes and 65 percent subscribe to it. The Act also freed long-distance carriers to enter the local exchange business, which receives 25 percent of its revenues from long-distance carriers, who pay over 45 percent of their operating revenues in return for access to exchange subscribers. Overall, the Act's various provisions are estimated to affect activities accounting for more than 15 percent of GNP.

The Act also benefits government decision makers. Among other things, it recodified the "public interest" standard of broadcast regulation and frequency assignments, thereby keeping program content at least nominally responsive to political pressure. The Act recodified the prevailing goal of "universal service" (a phone in every household) and extended this goal by requiring carriers to provide broadband services "to elementary schools, secondary schools, and libraries for education purposes at rates less than the amounts charged for similar services to other parties" (Sec. 254, *emphasis added*). This provision is less aggressive than the Clinton administration's proposal, which sought "free" service for government institutions.¹⁶ The Act delegates the actual pricing of these services to the FCC and state regulators, an instance of "tax and spend" policies being decided behind a veil of public utility regulation.

16. See, for example, a report by *Telecommunications Week* (22 February 1994) concerning Vice President Gore's goal of "free" universal service to all schools and public institutions by the year 2000.

The Act creates two new bureaucracies. One is the Telecommunications Development Fund, to be administered by a not-for-profit corporation whose redistributive goals include promoting access to capital by small business; stimulating technology development and promoting job training and employment; and promoting the delivery of telecommunications services to “under-served” areas. The other is the National Education Technology Funding Corporation, whose goals include stimulating the development of telecommunications infrastructure for educational purposes; making loans and grants to schools and libraries to foster the application of telecommunications technology; and serving as a clearinghouse for technical information and technical assistance. Both entities are to be funded primarily from the proceeds of telecommunications spectrum auctions. Given that the auction of spectrum already has fetched several billion dollars, it follows that these bureaucracies will become major attractions on the rent-seeking circuit.¹⁷

Finally, the Act imposed various content controls on the transmission of information that is indecent, violent, or pertains to abortion.¹⁸ These provisions raise First Amendment issues in addition to practical concerns about how the flow of such information can be controlled. The provisions appear to have been well intentioned. They also constitute blatant rents to ideological rent seekers.

The Telecommunications Act of 1996 contains something for everybody: All segments of the telecommunications industry are now free to exploit the supposed “synergies” of integration viewed as inherent in wireless and digital technologies; politicians and bureaucrats have new rules and bureaucracies that will yield decision-making rents over time. In view of its Christmas-tree character, it is not surprising that the Act passed with virtually unanimous consent—the vote in favor was 414–16 in the House and 91–5 in the Senate.

17. Congress historically opposed auctions as a means of distributing spectrum licenses. It acquiesced in the auction of Personal Communication Service (PCS) licenses after the FCC’s cellular radio lotteries randomly transformed ordinary citizens into instant millionaires. However, Congress deadlocked over auctions for HDTV frequencies. Some members liked the idea of raising (and spending) the estimated \$3.5 billion to \$70 billion that could be raised by auction. Other members supported the broadcasters’ case for free use of the frequencies “in the public interest.” The reason that HDTV is more highly “affected with the public interest” than PCS is not readily apparent; the theory of this paper suggests that some members of Congress simply depend on broadcasters for electoral support and favorable coverage back home to a greater extent than other members do. Unable to break the deadlock, Congress dropped the issue from the Telecommunications Act of 1996.

18. These provisions are contained in the Communications Decency Act of 1996, which is part of the overall Telecommunications Act of 1996.

Decision-Making Interests in Perspective

The overarching course of telecommunications policy just outlined is consistent in direction with policy choices that could have emerged from a deliberate application of economic principles. Clearly, however, that course was not produced by the conscious application of principles. Rather, it was an artifact of the conflicting interests of regulators, legislators, and judges. These conflicts, played out in a climate of competition, brought about the creative destruction of status quo regulation.

State Regulators

State regulators increased their utility by discovering clever ways to shift local exchange costs into the interstate jurisdiction. Doing so created settlement revenues that regulators applied against the cost of residential exchange service, thereby causing its price to be about one-half of that charged for comparable business service. This policy choice might seem surprising: the Economic theory of regulation predicts that business subscribers would organize to capture a substantial share of the interstate revenues. Instead, regulators distributed the gains among residential subscribers, and businesses rarely appeared in state rate proceedings to press their interests as ratepayers. The key to understanding this paradox lies in the high visibility of telephone rates. Residential subscribers—that is, voters—know how much they pay for telephone service compared to the amount paid by businesses; it is common, for example, for rates to be published in the front pages of telephone directories. This knowledge makes it awkward for regulators to favor business subscribers. Moreover, favoring residential subscribers satisfies the populist notion that business should pay benefits to individuals. The utility-maximizing choice for regulators, whether elected or appointed to office, is to favor residential subscribers. Similar reasoning applies to the subsidization of exchange service through state toll revenues. Here too the redistribution flowed from business subscribers, who are relatively heavy users of toll services, to residential subscribers.

In contrast, the tendency of state regulators to benefit high-cost rural subscribers agrees with the Economic theory of regulation: rural subscribers are a relatively concentrated interest group, and the cost of benefiting them is easily and invisibly spread over the general body of ratepayers by means of cost and rate averaging. Policies that favored contemporary subscribers over future subscribers through the prescription of exceptionally long depreciation periods is a no-brainer given that future subscribers have no current political voice.

State regulators furthered their own interests by policies that prevented competitors and end-users from dissipating regulatory rents. Accordingly,

state legislators and regulators promoted a monopoly industry structure and resisted competition and deregulation until the conflicting interests of the FCC, Department of Justice, federal courts, and Congress first eroded, then terminated the states' ability to capture rents through status quo regulatory policies.

Federal Regulators

The FCC took little interest in telephone regulation until 1965, when Congress, responding to concerns voiced by constituents, directed it to investigate interstate rates. Previously, the FCC's business consisted largely of awarding broadcast licenses and passing upon license renewals, activities ostensibly driven by "public interest" considerations but in fact intensely political.¹⁹ Changes in political sensibilities, coinciding with the exhaustion of assignable broadcast licenses, changed the dynamics of the FCC, which by the mid-1960s was using its power over broadcasting and telephony to promote the normative social goals of the Great Society.

Congressional pressure to investigate interstate rates revealed the FCC's inability to regulate the telephone industry, because of the industry's control over essential information and because of its political power—that is, its ability to satisfy the private interests of regulators and legislators at all levels of government. The FCC's backdoor approach to regulation—the use of limited competition—was adopted only as a regulatory tool.

FCC decision makers captured regulatory rents by bending policies to favor political interests and by pursuing remunerative private-sector jobs. Many FCC commissioners moved into law partnerships and management positions in the telecommunications industry. Commissioner Kenneth Cox, who supported the grant of operating authority to MCI, became a senior vice president of MCI immediately upon the expiration of his FCC term. Commissioner Benjamin Hooks, who encouraged the use of monopoly rents to train and employ minorities, became executive director of the NAACP. (Not all commissioners were so fortunate: the career and subsequent life of Commissioner Thomas Mack were ruined by his FCC activities; and Mack's legal assistant chose suicide over an investigation of his own activities.)

FCC staffers face a shorter list of capturable rents than do commissioners. The principal rents capturable by staff are ideological—making the world work according to such private preferences as the attainment of abstract efficiency goals, for example. The pursuit of efficiency goals by FCC staff surely played a role in the agency's policy choices from Carterphone onward, and resonated with the appointment of pro-market commissioners

19. See generally the sources cited in note 1.

and senior staff during the Reagan Administration. Even so, the agency's articulation of a regulation-free telecommunications industry structure did not occur for several more years (Fowler, Halprin, and Schlichting 1986), by which time substantive policymaking authority had shifted to the MFJ court.

Federal Courts

The private interests of judges had a substantial impact on telecommunications policy. The court's Hush-a-Phone decision created new property rights for telephone users (rights to use) by taking rights away from AT&T (rights to exclude) and industry regulators (rights to decide). The MFJ court controlled national telecommunications policy between 1984 and 1996, adopting policies often at odds with those recommended by the FCC, the National Telecommunications and Information Agency (NTIA), and the Justice Department. The judges fashioned policies according to their own notions of how the world ought to work, frequently without regard for economic principles, market realities, and the evidentiary record.

Congress

Congress's failure to enact telecommunications legislation until 1996, posturing for twenty years during a period of profound change, is consistent with the rent-seeking and rent-extraction model advanced in this essay. Enacting legislation quickly in response to changing circumstances, as opposed to promising or threatening action over a protracted period, does not necessarily maximize the private value inherent in Congress's right to decide the issues. Decisive action removes (or at least changes) the incentives for private factions to deliver further electoral support (campaign contributions, votes, and so forth) and other rents. So long as at least one strong faction actively opposes legislation, the present value of decision-making rents can be increased by delaying action. The resulting pattern of timing and activity is consistent with the predictions of the Status Quo theory of regulation identified earlier, although its actual roots are very different.

By 1996, market realities made it irrational for any strong industry faction to hold out against legislative change, because of the new profit opportunities and because new technology had rendered status quo regulation unsustainable. The Baby Bells, for example, foresaw wireless technology eroding the demand for traditional wireline communications. Congress saw this as well: Senator Robert Packwood (1995), who prior to his premature departure from Congress was chairman of the Senate Communications Subcommittee, expected the Bells to lobby Congress by the year 2000 seeking a multibillion dollar tax write-off for wireline plant rendered obsolete by wire-

less technology. This prospect suggests not only the likelihood of substantial legislative rents being captured down the road, but also that status quo regulation and rent extraction policies had reached a logical end.

The Act's passage was assured when all industry factions came to see regulatory change as in their private interest. Legislators dutifully voted these interests, perhaps telling themselves that their votes were justified by the predicted growth in jobs, GNP, and tax revenues.

Summary

The Communications Act of 1996 set the stage for a new cycle of rent seeking and rent extraction by government and industry factions. Four target areas have been identified: control over telecommunications content; new bureaucracies with broad and autonomous power to redistribute wealth; statutory price discounts for designated consumers; and prospective tax legislation. Other areas surely exist and will be revealed over time.

It is reasonable to predict that some of the factions that supported the Act will clamor for renewed regulation in the near term. Apart from a few obvious technological "synergies," such as the capacity for telephone, television, and multimedia services to be delivered over a single wideband cable or optical fiber, it is far from certain that unfettered competition will produce substantial profits for any player, much less for all of them. As the realities of telecommunications technology and markets become manifest, some players will discover that they are holding the short end of the deregulatory stick. Given the billions of dollars at stake, this discovery will lead to reregulation initiatives designed to protect carriers against "unfair" competition, both foreign and domestic. Successful players also have an incentive to seek regulatory protection of profitable market niches, and will invoke the proven mantra of telecommunications "universality" in the attempt to get it. Politicians and bureaucrats will discover new opportunities to build political capital and extract rents by promising and threatening reregulation, just as Congress profited in the past by regulating cable television rates, only to deregulate them, then reregulate them, then deregulate them again.

The Telecommunications Act of 1996 does not signal the end of government intervention in telecommunications markets. Rather, it signals a new beginning, with new rules, new players, and new opportunities to capture decision-making rents. These opportunities, along with ongoing changes in technology, will drive the next cycle of telecommunications policy.

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References

- Baldwin, John. 1975. *The Regulatory Agency and the Public Corporation*. Cambridge, Mass.: Ballinger Publishing.
- Berger, Raoul. 1977. *Government by Judiciary*. Cambridge, Mass.: Harvard University Press.
- Besen, Stanley, Thomas Krattenmaker, A. Richard Metzger, and John Woodbury. 1984. *Misregulating Television*. Chicago: University of Chicago Press.
- Bhagwati, Jagdish. 1982. Directly Unproductive, Profit-Seeking (DUP) Activities. *Journal of Political Economy* 90 (August): 988–1002.
- Brock, Gerald. 1981. *The Telecommunications Industry: The Dynamics of Market Structure*. Cambridge, Mass.: Harvard University Press.
- . 1994. *Telecommunications Policy for the Information Age*. Cambridge, Mass.: Harvard University Press.
- Brooks, John. 1975. *Telephone: The First Hundred Years*. New York: Harper and Row.
- Brown, Stephen, and David Sibley. 1986. *The Theory of Public Utility Pricing*. Cambridge: Cambridge University Press.
- Buchanan, James, Robert Tollison, and Gordon Tullock, eds. 1980. *Toward a Theory of the Rent Seeking Society*. College Station: Texas A&M University Press.
- Buchanan, James, and Gordon Tullock. 1962. *The Calculus of Consent*. Ann Arbor: University of Michigan Press.
- Coase, Ronald. 1959. The Federal Communications Commission. *Journal of Law and Economics* 2 (October): 1–40.
- Coll, Steve. 1986. *The Deal of the Century*. New York: Atheneum.
- Congressional Budget Office. 1984. *The Changing Telephone Industry: Access Charges, Universal Service, and Local Rates*. Washington, D.C.: Government Printing Office.
- Derthick, Martha, and Paul Quirk. 1985. *The Politics of Deregulation*. Washington, D.C.: The Brookings Institution.
- Epstein, Richard. 1985. *Takings: Private Property and the Power of Eminent Domain*. Cambridge, Mass.: Harvard University Press.
- Farber, Daniel, and Philip Frickey. 1991. *Law and Public Choice: A Critical Introduction*. Chicago: University of Chicago Press.
- Fowler, Mark, Albert Halprin, and James Schlichting. 1986. Back to the Future: A Model for Telecommunications. *Federal Communications Law Journal* 38 (August): 145–200.
- Gabel, Richard. 1967. *Development of Separations Principles in the Telephone Industry*. East Lansing: Michigan State University Institute of Public Utilities.
- Goldberg, Victor. 1976. Regulation and Administered Contracts. *Bell Journal of Economics and Management Science* 7 (Autumn): 426–48.
- Hawkins, Keith, and John Thomas, eds. 1989. *Making Regulatory Policy*. Pittsburgh: University of Pittsburgh Press.
- Hayek, F. A. 1988. *The Fatal Conceit*. Chicago: University of Chicago Press.
- Hazlett, Thomas. 1990. The Rationality of U.S. Regulation of the Broadcast Spectrum. *Journal of Law & Economics* 33 (April): 133–75.

- Krattenmaker, Thomas, and Lucas Powe. 1994. *Regulating Broadcast Programming*. Cambridge, Mass.: MIT Press.
- Landis, William, and Richard Posner. 1975. The Independent Judiciary in an Interest-Group Perspective. *Journal of Law and Economics* 18 (December): 875-901.
- Levin, Harvey. 1980. *Fact and Fancy in Television Regulation*. New York: Russell Sage Foundation.
- Lowi, Theodore. 1979. *The End of Liberalism: The Second Republic of the United States*. 2d ed. New York: Norton.
- Meyer, John, Robert Wilson, M. Alan Baughcum, Ellen Burton, and Louis Caouette. 1980. *The Economics of Competition in the Telecommunications Industry*. Cambridge, Mass.: Oelgeschlager, Gunn & Hain Publishers.
- McChesney, Fred. 1987. Rent Extraction and Rent Creation in the Economic Theory of Regulation. *Journal of Legal Studies* 16 (January): 101-18.
- . forthcoming. *Money for Nothing: Rent Extraction and Political Extortion*. Cambridge, Mass.: Harvard University Press.
- Mink, Phillip. 1989. *Newspaper Publishers and Freedom of Speech: Using the First Amendment to Protect Newspapers from Competition*. Washington, D.C.: Citizens for a Sound Economy Foundation.
- Mitchell, Bridger, and Ingo Vogelsang. 1991. *Telecommunications Pricing: Theory and Practice*. Cambridge: Cambridge University Press.
- Mueller, Dennis. 1989. *Public Choice II*. Cambridge: Cambridge University Press.
- National Association of Regulatory Utility Commissioners (NARUC). 1971. *Separations Manual*. Washington, D.C.: NARUC.
- National Telecommunications and Information Agency (NTIA). 1981. Comments of the National Telecommunications and Information Agency. 17 August. Federal Communications Commission Docket No. CC 80-286.
- . 1987. *NTIA Regulatory Alternatives Report*. Washington, D.C.: United States Department of Commerce.
- Noll, Roger. 1985. "Let Them Make Toll Calls": A State Regulator's Lament. *American Economic Review, Papers and Proceedings* 75 (May): 52-56.
- Owen, Bruce, and Ronald Braeutigam. 1978. *The Regulation Game*. Cambridge, Mass.: Ballinger Publishing.
- Packwood, Robert. 1995. Presentation of the Honorable Bob Packwood, United States Senator (Oregon). *Telecommunications Law Reform: Reinventing Competition* 31. Washington, D.C.: National Policy Forum.
- Peltzman, Sam. 1976. Toward a More General Theory of Regulation. *Journal of Law and Economics* 19 (August): 211-40.
- . 1980. The Growth of Government. *Journal of Law and Economics* 23 (October): 209-87.
- Posner, Richard. 1971. Taxation by Regulation. *Bell Journal of Economics and Management Science* 2 (Spring): 22-50.
- . 1975. The Social Costs of Monopoly and Regulation. *Journal of Political Economy* 83 (August): 807-27.
- . 1995. *Overcoming Law*. Cambridge, Mass.: Harvard University Press.
- Ray, William. 1990. *FCC*. Ames: Iowa State University Press.

- Smith, Adam. [1776] 1976. *The Wealth of Nations*. (Cannan edition). Chicago: University of Chicago Press.
- Stigler, George. 1971. *The Theory of Economic Regulation*. *Bell Journal of Economics and Management Science* 2 (Spring): 3-21.
- . 1975. *The Citizen and the State: Essays on Regulation*. Chicago: University of Chicago Press.
- Thurow, Lester. 1980. *The Zero Sum Society*. New York: Basic Books.
- Tullock, Gordon. 1986. *The Economics of Wealth and Poverty*. New York: New York University Press.
- von Auw, Alvin. 1983. *Heritage and Destiny: Reflections on the Bell System in Transition*. New York: Praeger.
- Wenders, John. 1987. *The Economics of Telecommunications: Theory and Policy*. Cambridge, Mass.: Ballinger Publishing.
- Wharton Econometric Forecasting Associates (WEFA). 1986. *Pricing Telecommunications Services: The Impact on the U.S. Economy of Subscriber Line Charges*. Philadelphia: WEFA.
- Wilson, James, ed. 1980. *The Politics of Regulation*. New York: Basic Books.

