FEDERAL AND STATE ROLES IN TELECOMMUNICATIONS:  
THE EFFECTS OF DEREGULATION  

Eli M. Noam
Federal and State Roles in Telecommunications: the Effects of Deregulation

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During the past decade, federal telecommunications regulatory policy has changed its focus from a goal of universally available and affordable residential service to one of economic efficiency. In changing its regulatory focus, the federal government has indirectly deprived the states of the means to accomplish their goal, which remains one of insuring universally available and affordable residential service. In his Article Professor Noam examines the evolution of the traditional federal-state coregulatory system, contrasts the emerging federal regulatory approach with the states' policies, and discusses the reasons for federal predominance in telecommunications regulation. He argues that the reorientation in federal regulatory policy is creating administrative problems for state regulators and will impair their ability to attain universally available and affordable residential service. Professor Noam predicts that if the states abandon their policy goals in favor of the federal goals, they actually will weaken federally inspired entry into the telecommunications industry and thus hamper the federal government's ability to realize its goal. He concludes that the current coregulatory system is probably not stable and that a new intergovernmental consensus is necessary to replace the present federal dominance.

I. INTRODUCTION

Recent years have witnessed a fundamental reorientation of federal policy in the telecommunications sector. A series of actions after 1968, culminating in the Federal Communication Commission's (FCC) 1980 Second Computer Inquiry decision1 and the

* Associate Professor of Business and Lecturer in Law, Columbia University. A.B., 1970, Harvard University, A.M., 1972, Ph.D., 1975, J.D., 1975. The author gratefully acknowledges support by the National Science Foundation (Grant #IST-82-09485), which helped in the writing of this Article. Mark Nadel's contribution was both invaluable and excellent. I have also benefited from the help of Michael Botein, John Chapman, and Harry Trebing, and from the assistance of Florence Ling and Virginia Marion. Special and warm thanks go to my wife Nadine Strossen, my favorite legal counsel.

1. Amendment of Section 64.702 of the Comm'n's Rules & Regulations (Second Computer Inquiry), 77 F.C.C.2d 384, modified on reconsideration, 84 F.C.C.2d 50 (1980), modi-
1982 American Telephone and Telegraph Company (AT&T) divestiture decree, greatly transformed the once rigorous controls that the FCC and the Justice Department (the latter through its 1956 consent decree with AT&T) imposed on telecommunications. In a federal system policy changes at one level of governmental regulation have ramifications on the regulation by other levels, and the telecommunications sector is no exception. Major changes in the nature of the federal-state relationship in communications regulation have accompanied the dynamic development and application of communications technology.

The system of federal and state responsibility for communications regulation traditionally had been one of coregulation. A high degree of commonality of federal and state goals existed in this system. The cooperative spirit was so great that the federal level permitted major revenue transfers to the states' domain to alleviate local rate pressures for which the federal government had no direct oversight responsibility. As the 1970's unfolded, however, the divergence in goals between the federal and state levels of government became pronounced. The federal redistributory or equity goal became secondary to a pursuit of economic efficiency through reliance on a change in markets and competition.

During the last decade the traditional system has disintegrated rapidly, with the federal government pursuing a fundamentally different policy than the states and becoming the predominant force in the shaping of telecommunications policy. The federal government uses a different basic regulatory technique than do the states and indirectly deprives them of the means to fulfill their traditional goals. Moreover, the government legally constrains the states' ability to pursue these objectives in alternative ways.

The purpose of this Article is to illuminate the changes that have occurred in communications regulation and to examine the nature of federal and state responsibilities in the area of telecommunications. Section II describes the evolution of the traditional coregulatory regime; section III analyzes the federal regulatory ap-


II. THE TRADITIONAL AND CHANGING ROLES OF FEDERAL AND STATE REGULATORS IN TELECOMMUNICATIONS

The traditional division of regulatory responsibility in telecommunications is easy to summarize: the regulation of all forms of wireless communication is exclusively federal, whereas the federal government shares regulation of wire communications with state and local governments. The federal government shares the regulation of telephony with the states and the regulation of cable television primarily with the states and localities. This separation has technological as well as historical roots. Broadcast technology is not containable within state boundaries and requires centralized spectrum allocation coupled with periodic international agreements. The Navy was the first user of wireless communications in the United States; and the technology's pre-New Deal regulatory history was too brief to let a nonfederal tradition emerge. These technological and historical circumstances explain the predominant federal role and the minor involvement of the states in wireless communications regulations. The licensing of all forms of over-the-air transmission, therefore, has been exclusively federal. Even parties operating solely intrastate communications are within the domain of the federal regulators. Similarly state and local governments have no formal role in the licensing process of cellular radio, a mobile telephone technology. Although localism is at the heart of the FCC's philosophy in allocating broadcast licenses and regulating signal strength—in contrast to the usually centralized and

high-wattage European broadcasting systems—local and state governments have not participated in broadcast licensing proceedings other than as regular intervenors or as licensees of public broadcast stations themselves.\textsuperscript{10}

Over-the-air transmission comes in a variety of forms. The FCC has federal jurisdiction over all civilian applications including radio broadcasting;\textsuperscript{11} television;\textsuperscript{12} satellite communications;\textsuperscript{13} radio telephony, paging, cellular radio;\textsuperscript{14} standard point-to-point microwave transmission;\textsuperscript{15} multipoint distribution system transmission;\textsuperscript{16} digital termination service;\textsuperscript{17} amateur radio;\textsuperscript{18} and citizens’ band.\textsuperscript{19} In addition, the FCC has expanded its regulatory oversight to non-broadcasters by linking them to broadcasting. In cable television, for example, the regulatory nexus was both the cable operator’s use of microwave transmission to import programming, and cable transmission’s ancillary relationship to broadcasting.\textsuperscript{20} The FCC...
also has established some measure of indirect regulatory control over the television networks through its power to license broadcast stations either affiliated with or owned by the networks.

Thus, from the beginning courts have recognized the federal government’s preemptive authority to regulate the use of radio spectrum. Judicial decisions have supported the position that the use of radio services is entirely an interstate matter, even if reception is not possible across a state line. The federal government, in effect, has had exclusive jurisdiction over wireless communications.

The division of authority in telephone regulation is much more complex than in over-the-air regulation. Telephone signals follow specific paths and are not inherently interstate in character. In addition, for several decades before federal intervention, the medium established a strong tradition of state or local regulation partly because wire transmission requires the use of public rights of way, which traditionally are subject to state control. Furthermore, telephony tends to have natural monopoly characteristics

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22. Id.


24. See, e.g., Gagliardo v. United States, 366 F.2d 720 (9th Cir. 1966).

25. On occasion, federal, state, and local regulations may be in conflict on issues concerning physical facilities. For example, the FCC may permit broadcasters, including radio amateurs, to erect antennas of a certain height, see 47 C.F.R. § 97.45 (a)(1) (1976), while local government ordinances prohibit such heights. Since the reception of a broadcast signal depends on transmission antenna strength, this local regulation interferes with interstate broadcast activity. Comment, Local Regulation of Amateur Radio Antennae and the Doctrine of Federal Preemption: The Reaches of Federalism, 9 PAC. L.J. 1041 (1978).


27. See Walker v. City of Birmingham, 388 U.S. 307, 315 (1967) (“We have consistently recognized the strong interest of state and local governments in regulating the use of their streets and other public places.”)
such as high fixed costs, relatively low variable costs, and network externalities—that is, additional users benefit previous users. These conditions favored single firm production in a given area, which in turn lead utility rate regulation—the traditional response to natural monopolies, and a remedy historically within the jurisdiction of state and local governments.

While state involvement in telephone services dates to the 1880's, and regulation by state commission began in 1907, over time the emerging interstate telephone network also called for some federal responsibility. Therefore, the Mann-Elkins Act, which Congress passed in 1910, extended some undefined regulatory authority to the Interstate Commerce Commission (ICC). Although the ICC largely failed to exercise this authority in its early years, it did actively establish a position of dominance over state regulation of railroad transportation in the “Shreveport Rate Cases.” By analogy to the Shreveport cases, the states’ authority in the telephone area became tenuous; the states ultimately were only as powerful as the ICC allowed them to be, even though barely two percent of telephone messages were interstate.

The Communications Act of 1934 merged the ineffectual Federal Radio Commission’s authority and the ICC’s telephone jurisdiction into the newly created Federal Communications Commission and increased and clarified that agency’s mandate. At the same time, the states urged a statutory limitation of the FCC’s

28. See infra note 157 for a definition of network externalities.
29. The Supreme Court accepted state regulation of telephone companies in Home Tel. & Tel. Co. v. City of Los Angeles, 211 U.S. 265, 271 (1908).
31. Id.
34. 78 Cong. Rec. 10316 (1934) (statement of Rep. Merritt); see H.R. Rep. No. 1850, 73d Cong., 2d Sess. 4-7 (1934) (explaining the general provisions of the Communications Act of 1934, which does not apply to purely intrastate businesses).
36. Id. §§ 154-155.
37. See Wheat, The Regulation of Interstate Telephone Rates, 51 Harv. L. Rev. 846,
authority over intrastate wire communications, and Congress responded by adding to the Act sections 2(b)\(^38\) and 221(b)\(^39\). Section 2(b), which applies only to the first section of the Act, prohibits FCC regulation "in connection with intrastate communication service by wire . . . ."\(^40\) The first section of the Act defines the separation between interstate and intrastate communications and provides that interstate communications fall within the jurisdiction of the FCC.\(^41\) Section 221(b) defines the divisional point in the telephone network. The separation occurs at the local exchange facility.\(^42\) Hence, the interstate domain consists of those services and their facilities that lie between local exchanges and that cross interstate lines.\(^43\) The congressional intent clearly was to limit the scope of federal telephone regulation.\(^44\) Thus the House reported that "some 97\(\frac{1}{2}\) or 98 percent of all telephone communication is intrastate, which this bill does not affect."\(^45\)

Despite the statutory language, however, the physical network facilities are not neatly separable into their intrastate and interstate components. On the contrary, they fulfill both functions simultaneously. During the era following the 1934 Act, public policymakers were under continuous pressure to reconcile the statutory fiction of separation with the reality of integration. What emerged from these efforts was a system of coregulation, in which both federal and state agencies regulated the same facilities at the same time. Two circumstances facilitated the development of this system. First, for many years the Commission's regulatory priority was broadcasting, particularly as television grew. Second, the gen-

\(^{38}\) Pub. L. No. 83-345, § 1, ch. 175, 68 Stat. 63, 63-64 (codified as amended at 47 U.S.C. § 152(b) (1976)). The provision reads:

Subject to the provisions of section 301 . . . [relating to radio and television], nothing in this chapter shall be construed to apply to or to give the Commission jurisdiction with respect to (1) charges, classifications, practices, services, facilities, or regulations for or in connection with intrastate communication service by wire or radio of any carrier . . . .

\(^{39}\) Pub. L. No. 83-345, § 4, ch. 175, 68 Stat. 63, 64 (codified as amended at 47 U.S.C. § 221(b) (1976)).


\(^{41}\) Id. § 151.

\(^{42}\) Id. § 221(b); Note, supra note 26, at 747.

\(^{43}\) Id; see Kitchen v. FCC, 464 F.2d 801 (D.C. Cir. 1972) (per curiam); Southwestern Bell Tel. Co. v. United States, 45 F. Supp. 403 (W.D. Mo. 1942).

\(^{44}\) See Note, supra note 26, at 748-49. Congress did grant the FCC power, which was not limited to interstate telecommunications, to establish a uniform system of accounting. 47 U.S.C. § 220 (1976).

eral regulatory philosophy of the FCC was similar to that of the state commissions: a commitment to universal service, affordable rates to residential subscribers, and a unified national network based on the integrity of AT&T. The coregulatory regime was essentially cooperative. Because federal and state regulators shaped the goal of equity—universal service and affordable rates—the FCC even provided states indirectly with the means to maintain low local exchange rates, by regulating rates at a relatively high level and permitting a cost recovery above its actual contribution. Thus, in an unusually cooperative stance, the FCC alleviated the pressures on other regulatory bodies.

The cooperative system, however, could not last when its constituents’ fundamental goals diverged. This divergence of goals occurred when the FCC began to embrace the concepts of efficiency, competition, markets, and entry, while the state commissions continued to emphasize equity and redistribution. The split emerged first in the accessory equipment area. In a series of decisions culminating in *Carterfone* and the equipment registration decision, the FCC opened the accessory equipment market to rivals of AT&T’s manufacturing arm, Western Electric. The states, on the other hand, advocated a restrictive approach during this period, largely for fear of losing the subsidy to residential rates that the liberalization would cause. The states adopted AT&T’s arguments concerning the effect of residential rate subsidies and echoed the estimates of experts who predicted that subscriber rates would increase by as much as seventy-six percent.

47. See infra note 159 and accompanying text.
Several states attempted to impose restrictions notwithstanding the FCC's actions, but the Commission prevailed in the courts in North Carolina Utilities Commission v. FCC. The separation of interstate and intrastate communications by sections 2(b) and 221(b), the legal linchpins of the cooperative system, did not survive this decision. Instead, the court found that state action had frustrated the Commission's efforts to discharge its responsibilities under sections 201 through 205 of the 1934 Act to create a national system of telecommunications. The state action, therefore, was invalid. The court read section 2(b) to apply only when intrastate networks were "in their nature and effect . . . [separate] from and . . . not substantially affect[ing] the conduct or development of interstate communications." This narrow interpretation rendered the section meaningless since the integration of interstate and intrastate aspects of telephone communications exists nearly everywhere. If virtually all facilities of a nationwide network are part of the interstate network, FCC jurisdiction extends to all aspects, and the federal preemption relegates the states to a dependent role. Hence, state regulation of telephone service, in the presence of an articulated FCC policy, is largely at the sufferance of the FCC, and state regulation in the broadcast field is nonexistent.

The deregulation of terminal equipment was only one part of the Commission's evolving policy of substantial entry decontrol; other areas in which the Commission's policies differed from State policies also emerged during this time. In a major departure from the previous policy of maintaining AT&T's long distance monopoly, the FCC opened the long distance market to new entrants. Departing cautiously from its 1959 Allocation of the Frequencies in the Bands Above 890 Mz decision, the agency successively liberalized entry in Microwave Communications, Inc. (1969), in Specialized Common Carrier Services (1971), and in Establishment

51. 537 F.2d at 793.
52. Id.
of Domestic Communications Satellite Facilities by Nongovernment Entities (Domsat)\(^6\) in 1972, and finally, compelled by the courts in the Execunet cases (1977 and 1978).\(^5\) Again, the states generally opposed the decontrol, but did not prevail.

In its Second Computer Inquiry decision,\(^6\) the FCC made another major policy change by permitting telephone carriers to provide enhanced unregulated services, deregulating new terminal equipment, and freeing the new equipment from state tariffing. The decision required AT&T to separate these activities structurally from its regulated activities.\(^6\) Again the states were unsuccessful in their opposition to decontrol.

Similarly, in the broadcast area the Commission encouraged the entry of new technologies to supplement traditional VHF and UHF broadcasters. The FCC permitted pay-broadcasting television, that is, subscription television (STV),\(^6\) as well as Low Power Television (LPTV),\(^6\) to make new uses of the VHF/UHF frequencies. In addition, the Commission allocated microwave frequencies to common carrier Multipoint Distribution Service (MDS),\(^6\) and

\(^{55}\) 35 F.C.C.2d 844 (1972).


\(^{57}\) Amendment of Section 64.702 of the Comm'n's Rules & Regulations (Second Computer Inquiry), 77 F.C.C.2d 384, modified on reconsideration, 84 F.C.C.2d 50 (1980), modified on further reconsideration, 88 F.C.C.2d 512 (1981), aff'd, 693 F.2d 198 (D.C. Cir. 1982).

\(^{58}\) 77 F.C.C.2d at 461-87.


\(^{60}\) An Inquiry into Future Role of Low Power Television Broadcasting and Television Translators in the National Telecommunications System, 51 Rad. Reg. 2d (P & F) 476 (1982); see also Broadcasting, May 17, 1982, at 65. LPTV service uses weak signals (less than 1000 watts of power to broadcast over a radius of approximately 25 miles).

perhaps most importantly, approved the use of Direct Broadcast Satellites (DBS).\textsuperscript{63} The FCC now has begun to open the way for "bypass technologies" that are able to provide alternatives to local distributions by telephone companies. Thus, in 1981 the Commission allocated radio frequency spectrum to Digital Termination Systems (DTS)\textsuperscript{64} and began to process applications. The Commission also has approved another related technology, cellular radio.\textsuperscript{65} In addition, the FCC permitted AT&T to offer overseas communications service in competition with the International Record Carriers (IRC).\textsuperscript{66} Furthermore, the FCC has opened the international communications market to Western Union\textsuperscript{67} as well as the domestic market to the IRCs.\textsuperscript{68}

During the time that the FCC was changing its deregulatory policy to favor entry, another federal agency, the Antitrust Division of the United States Department of Justice, was pursuing an important attack against concentration in the communications industry. In 1974 the Justice Department brought an antitrust suit against AT&T to force divestiture of its subsidiary Western Electric and of the regional Bell Operating Companies (BOCs).\textsuperscript{69} In the dramatic January 1982 consent agreement that settled the case, AT&T agreed to divest itself of the BOCs, which henceforth would perform only regulated local exchange functions. The remaining AT&T Company would provide interexchange service, produce terminal equipment, and provide other unregulated services through

\textsuperscript{63} Inquiry into the development of regulatory policy in regard to Direct Broadcast Satellites for the period following the 1983 Regional Administrative Radio Conference, 90 F.C.C.2d 676 (1982); see Evanow, 30 Million Dishes 30 Million Homes, CABLEVISION, Sept. 6, 1982, at 20.

\textsuperscript{64} Amendment of Parts 2, 21, 87, and 90 of the Commission's Rules to Allocate Spectrum for, and to Establish other Rules and Policies Pertaining to, the Use of Radio in Digital Termination Systems for the Provision of Digital Communications Services, 86 F.C.C.2d 360 (1981), modified, 90 F.C.C.2d 319 (1982). Digital termination systems are local distribution services that transmit high speed digital data traffic over microwave frequencies. The allocation was sufficient to accommodate up to seven extended networks, which would provide service to 30 or more standard metropolitan areas and to six limited networks. Id. at 369-71, 373-74.

\textsuperscript{65} See supra note 14.

\textsuperscript{66} Inquiry Into Policy to be Followed in Future Authorization of Overseas Dataphone Service, 57 F.C.C.2d 705 (1976).

\textsuperscript{67} See Western Union Int'l, Inc., 76 F.C.C.2d 166 (1980).

\textsuperscript{68} See International Record Carriers' Scope of Operations in the Continental United States, including possible revisions to the formula prescribed under Section 222 of the Communications Act, 76 F.C.C.2d 115 (1980).

\textsuperscript{69} United States v. AT&T, 552 F. Supp. 131 (D.D.C. 1982) (action filed Nov. 20,
its fully separated subsidiaries. The consent agreement required the newly formed local companies to offer nondiscriminatory access to all AT&T competitors in the interexchange market. The states vigorously opposed many of the settlement terms, but their objections did not sway Judge Greene, who approved the decree with minor modifications.

Cable television, a hybrid of wire transmission with a broadcast-type function, is regulated by local authorities in their franchising capacity, by state agencies in several states, and by the FCC. After initial hesitation, in 1966 the FCC imposed a comprehensive regulatory scheme on the cable television industry. The Supreme Court in United States v. Southwestern Cable Co. upheld the FCC's jurisdiction, finding it "reasonably ancillary" to the Commission's jurisdiction to regulate broadcasting. The Commission's jurisdiction, however, was shaky both in terms of law and policy. The Eighth Circuit in Midwest Video Corp. v. FCC noted that the Commission's assertion of jurisdiction over cable has been "consistently and continually revised, unenforced, withdrawn, waived, and abandoned." When the United States Court of Appeals for the District of Columbia in Home Box Office,
Inc. v. FCC\textsuperscript{78} restricted the agency’s jurisdiction over pay-cable, and the Supreme Court in FCC v. Midwest Video Corp.\textsuperscript{79} held that the FCC has no authority to impose common carrier regulations on cable, and the Commission greatly accelerated its deregulation of cable.\textsuperscript{80} In part, the Commission perceived that because of the heavy local involvement in cable franchising, a detailed regulation of thousands of cable systems was far beyond its capabilities and inclinations.\textsuperscript{81}

The demise of the cooperative era in telecommunications regulations, both in shared policy goals and in the acknowledgement of the spheres of federal and state prerogatives, becomes clear after observing these diverging policies of federal and state regulators. The basic principle of the traditional coregulatory system, and the flaw that led to its demise, was the \textit{territorial} division of interstate and intrastate communications. When this separation principle became untenable because of the geographic integration of telecommunication facilities, the fallback definition became one of \textit{functional} separation, which gave each governmental level regulatory powers over those functions of the network that historically had been within that level’s domain.\textsuperscript{82} Functional separation did not survive the decision in \textit{North Carolina Utilities Commission}.\textsuperscript{83} The failure of functional separation led to the present system of \textit{goal} separation, in which efficiency goals are pursued primarily by the federal level while equity goals are pursued by the states.

\section*{III. The New Federal Regulation}

The FCC has received much attention for its new policies toward telecommunications regulation, which commentators generally describe as deregulatory in nature.\textsuperscript{84} These policies, coupled
with the Justice Department's AT&T divestiture agreement, however, are not deregulatory in the true sense of the word. Rather than eliminate governmental intervention, the policies substitute a fairly rigorous control of market structure for control over the regulator's behavior in setting prices and quality levels. Absence of intervention does not accurately describe the federal policy. This description mischaracterizes the disagreement between federal and state policies as one between free-marketeers and regulators, whereas the conflict actually is between different approaches to regulation. Limited entry decontrol more aptly describes the federal policy in the communications sector. The FCC frequently permits entry, and indeed even encourages it. The Commission, however, segregates different segments of the communications sector from each other, and often restricts participants in one area from entering another sector.

Despite the talk about freedom of entry and convergence of technology, the communications sector abounds with entry restrictions on some of its most likely entrants—those firms already operating in other segments of the communications industry. The divested former BOCs, for example, may not provide any nonmonopoly service. They may not enter interexchange transmission or offer information services, and they cannot manufacture equipment—although they may market it. Similarly, the FCC prohibits BOCs from owning and operating cable television systems. Since the BOCs comprise two-thirds of AT&T's assets and employees, the overall effect of divestiture on the Bell System quite possibly has been to add restrictions rather than to reduce them.

In the words of the New York State Public Services Commission staff, "[t]hese restrictions on the BOC's are tighter than the...
1956 Decree was on AT&T,” and

The intent of the Decree is to promote competition and so we are at a loss to understand why local telephone companies who have long provided equipment and interexchange services, and who have the expertise to continue to do so, should be denied the opportunity to enter these or other competitive telecommunications or information service fields . . . . It is clear that such opportunities, if available to the BOC's, would promote further competition, potentially prevent market dominance by the surviving AT&T company, permit BOC's to grow in the future and avoid the problems inherent in the 1956 Consent Decree which have already denied the public many technological innovations, new services, and/or lower prices."

The FCC has imposed similar restrictions in the broadcast field. The Commission still forbids commercial television networks from owning more than seven stations. At present, they may not own cable television franchises or resell programs that they originally aired, and they are subject to a ceiling of airing no more than three hours of prime time programming per day. Cable television operators may not own television stations broadcasting in the area in which the cable operators are located; similarly, television stations may not own cable networks operating in their area. In addition, cable television operators must carry, at no charge, the programs of all television broadcasters in their geographical area, which, in effect, makes these broadcasters favored entrants in the competition for viewers. Other structural restrictions prohibit foreign broadcasters from having control ownership interests in the United States stations, or owning controlling interests in telephone

88. Id. at 12.
89. 47 C.F.R. §§ 73.35, 73.240, 73.636 (1982). Congress, however, has slated this 7-7-7 rule for reconsideration. See Broadcasting, Dec. 20, 1982, at 56.
92. 47 C.F.R. § 73.658(k) (1982).
93. Id. § 76.501 (originally adopted as § 74.1131 in Community Antenna Television Systems, 23 F.C.C.2d 816, 823 (1970)).
companies. The FCC has structured the cellular radio market to consist of two services in each locality, with one assured to a local wire-line carrier—a local telephone company—and the other assured to anyone else.

Of course, structural regulation is not a new approach. The 1913 Kingsbury commitment subjected the Bell System to structural restrictions by requiring AT&T to exit from public telegraphy to divest itself of Western Union stock, to cease acquiring new territories, and to interconnect with independent telephone companies. Nor is structural regulation the policy that the FCC has pursued in every instance. Indeed, the Commission has removed some barriers that separated different communication firms. For example, the FCC recently eliminated the careful separation of domestic and international telegraphy, which Western Union and the so-called IRCs operated respectively. In addition, the agency permitted the IRCs to provide voice service. Despite such instances of structural decontrol, the present policies of the FCC and the Justice Department rest strongly on the structural separation of communication firms.

Several justifications support the FCC's structural separation policies. First, structural separation prevents possible cross-subsidization of the competitive segments of a firm's activities by the firm's naturally monopolistic parts. A strict separation between the two segments is necessary if sustainable entry into competitive markets is to exist. Second, concerns of diversity, political power, and localism concerns favor the diffusion rather than the concentration of control over communication. Hence, the Commission has placed restrictions on cross-ownership of different tele-

97. See Gabel, supra note 26, at 352.
98. See Trebing, A Critique of Structural Regulation in Common Carrier Telecommunications, in E. NOAM, supra note 4, at 125.
100. Western Union, 76 F.C.C.2d 166 (1980).
101. Clearly, if an existing firm subsidizes its competitive activities through its monopolistic segments, it can provide the competitive service at lower prices than can market entrants.
102. See B. OWEN, J. BEEBE, & W. MANNING, TELEVISION ECONOMICS 49 (1974); supra note 29 and accompanying text; see also B. OWEN, ECONOMICS AND FREEDOM OF EXPRESSION 111 142 (1975).
Last, since encouraging entry into content markets such as information services or entertainment programming strengthens the importance of conduit access, structural separation may be necessary to reduce the potential for unfair competition by a vertically integrated firm that is both an essential conduit and a content supplier with other nonintegrated providers. This argument applies primarily to the BOCs, which may not enter the content market, and to AT&T, which may not provide information content services for seven years. The Commission hitherto has not used this argument in its policy toward cable television, in which integration of conduit and content functions is increasing.

The problems with structural regulation are several. First, structural regulation must be recognized as a form of regulation often quite restrictive in nature. To draw an analogy, the exclusion of certain types of vehicles from a highway is at least as restrictive as a speed limit. Furthermore, structural regulation is not easy to maintain in the midst of unprecedented technological change and entrepreneurial application. A regulator can restrict the participants in one market from entering another market only when the technologies in question clearly are distinguishable. For example, when cable television systems provide high-speed data transmission, as some already have started to do, they thereby eventually may become subject to restrictions that the FCC imposes on telephone companies, such as abstention from content activities. In Nebraska, for example, the Public Service Commission has ruled that the Cable company Cox of Omaha, in supplying voice and data transmission services, is a common carrier subject to their tariff regulation.

105. Id. at 180-86.
107. See supra text accompanying notes 83-96.
109. Noam, supra note 86, at 222 n.58.
An example of the way in which technological developments make structural policies obsolete is the FCC’s treatment of telephone companies that provide computer services. Originally, in its 1971 First Computer Inquiry decision the FCC favored freeing data processing services from regulation and permitting common carriers to enter the market through separate subsidiaries. Almost immediately, the definitions of data processing and communication services that the opinion contained became obsolete, since the emergence of distributed processing had shifted computing activities from centralized mainframe computers to “smart” terminals that are configured in networks and are under the user’s control. With this new technology, the distinctions between unregulated data processing and regulated communications functions is more difficult to make. To reformulate its decision, the FCC initiated a new inquiry. The 1980 Second Computer Inquiry decision focused on the structure under which the computer services were provided to the consumer. The Commission sought to distinguish between “basic” and “enhanced” transmission services. Yet the separation point between these two communication services is difficult to determine and is likely to cause continued contention.

Efficacy is another fundamental problem of structural regulation. Underlying the structuralist approach is the expectation that entry, coupled with separation of markets, will lead to cost-based pricing through competition in prices and quality of service. In addition, proponents of structural regulation claim that it will provide users with a welcome choice, eliminate market power, and obviate the need for traditional price/earnings conduct regulation. Whether structural regulation can accomplish these feats is ques-

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112. Id. at 268-75. The decision repeatedly stressed that AT&T could not offer data processing even through a separate subsidiary because of AT&T’s 1956 consent decree, United States v. Western Elec. Co., 1956 Trade Cas. (CCH) ¶ 68,246 (D.N.J. 1956), which precluded the company from offering data processing services. Id. at 282, 298-99, & 305.
114. Id.
115. Id.
116. Id. at 394-95.
117. See Trubek, supra note 9.
tionable.\textsuperscript{118} Professor Trebing, in a recent analysis of telecommunications regulation,\textsuperscript{119} voices his skepticism about its prospects. He observes that market shares of AT&T, the dominant firm, have been noticeably stable in many, although not all, instances, even after competitors' entry into parts of its business.\textsuperscript{120} For example, the share of the market for key type telephones that manufacturers affiliated with telephone companies held merely dropped from 98.3\% in 1968 to 89.4\% in 1979.\textsuperscript{121} Similarly, telephone company affiliated manufacturers of dial-in-hand set telephones lost only 4\% of their 100\% market share during the same period.\textsuperscript{122} Despite MCI's success in long distance transmission, its market share was still only 4\%, while AT&T's market share was 84.9\%.\textsuperscript{123} The primary exception to the dominant firm's market share stability is private exchanges (PBXs), for which AT&T's market share declined from 93\% in 1968 to 56\% in 1979.\textsuperscript{124} One analyst has argued that "AT&T will continue to enjoy significant monopoly price-setting power even as its market share declines (for the terminal equipment market). The Bell System currently has the market power to set prices at more than 200\% over cost."\textsuperscript{125}

One reason for the persistence of high market shares or profit rates may be the existence of economies of scale, which protect incumbent firms through cost advantages. Empirical studies have estimated these scale economies to be moderate but persistent for

\begin{footnotesize}
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\item \textsuperscript{118} The legal ability to enter a market is neither sufficient nor always necessary for competitive conditions to emerge. Theoretically, even a 100\% market share may not permit a firm to engage in monopolistic behavior if potential entrants hover at the edge of the market, ready to enter if returns become sufficiently attractive. Economic theorists recently have refined this argument, which the Court anticipated to some extent in \textit{FTC v. Proctor & Gamble Co.}, 386 U.S. 568 (1967). See Baumol, \textit{Contestable Markets: An Uprising in the Theory of Industry Structure}, 72 Am. Econ. Rev. 1 (1982). For a more detailed discussion of this argument, see W. Baumol, J. Panzar & R. Willig, \textit{Contestable Markets and the Theory of Industry Structure} (1982). For a critique of the theory when applied to the specific conditions of the telecommunications sector, see Shepherd, \textit{Concepts of Competition and Efficient Policy in The Telecommunications Sector}, in E. Noam, supra note 4, at 79.

\item \textsuperscript{119} See Trebing, supra note 98.
\item \textsuperscript{120} Id. at 140.
\item \textsuperscript{121} Id. at 138.
\item \textsuperscript{122} Id.
\item \textsuperscript{123} Id. at 140.
\item \textsuperscript{124} Id. at 138.
\end{itemize}
\end{footnotesize}
telephone interexchange service. Another circumstance which supports the theory that AT&T has the ability to control price is the provision of the 1982 divestiture agreement, giving the company control over already "embedded" technical equipment (CPE). Other firms in the industry recognize AT&T's advantages. For example, an internal RCA memorandum has declared, "Should AT&T ask for, and the FCC grant, permission to incrementally price private line services, all competitors would probably be wiped out." Similarly, General Electric has found that "[T]he Bell System can provide communication facilities at a lower cost than GE or any Special Service Carrier can. The big question is what prices will the FCC and AT&T agree upon for bulk services."

The dominant firm also can use incremental or marginal cost pricing to lessen and deter competition. Theoretical studies of a form of utility pricing known as "Ramsey pricing" have shown that a dominant firm need only price at some optimal level above marginal cost to preclude competition. Given AT&T's low incremental costs, the company would be in a strong position against entrants.

The foregoing discussion illustrates the fundamental weakness of an entry-based policy. Although open entry—or at least the threat of potential competitors—is necessary to achieve competitive markets, it is not sufficient by itself. To assume that the de jure removal of barriers leads to de facto competition is wishful thinking. For sustainable entry, an entrant's costs must not be above those of the incumbent firm or firms, and a reduction of the incumbent's ability to cross-subsidize the contested service segment is necessary. The FCC and the Justice Department have concentrated on limiting cross-subsidization, and largely have disregarded the issue of sustainable entry in its absence.

Since the FCC has chosen an open entry approach, the federal


127. CPE stands for "consumer premise equipment," which is telephone equipment already installed at a customer's office or residence.


policy now depends for success on the survival of entrants, which
tends to lead to a policy that focuses on ensuring the presence of
competitors rather than necessarily of competition. For example,
under the 1982 settlement, local exchange companies must give
AT&T's competitors in the interexchange markets access to the lo­
cal exchanges at the same rates they charge AT&T, even if
AT&T's large scale of operation and the resultant cost advantages
may justify a lower rate, "provided that the access is equal in type
and quality." Indeed, under the FCC's recently proposed access
charge arrangement, AT&T's indirect access charges are actually
higher during a five-year transition period than are the charges of
its competitors. To protect competitors the FCC also has tradi­
tionally supported UHF broadcasting, enacted must-carry rules
for broadcasters' access into cable television networks, allocated
one-half of cellular radio licenses to local telephone companies,
and restricted local telephone companies in providing cable televi­sion service. Concerning this last measure, Commissioner Joseph
Fogarty observed:

[The Commission must . . . confront the possibility that the prospect of
merging fiber optic technology with the local loop of the telephone exchange
may offer "natural monopoly" economies in the provision of broadband facili­
ties and services which a sound and rational policy analysis cannot ignore. If
these economies emerge in significant magnitude, then telephone company
competition in the cable television marketplace may be "unfair" only in the
sense that it may be inherently unbeatable. If this should prove to be the

132. See Exchange Network Facilities for Interstate Access (ENFIA), 71 F.C.C.2d 440
(1979); MTS and WATS Market Structure, 90 F.C.C.2d 135 (1982).
AT&T's interexchange competitors urged the district court to withhold its approval of
the consent decree until AT&T had agreed not to seek increases in the level of Operating
Company charges to interexchange carriers, which the FCC sets. See Exchange Network
MCI Telecommunications Corp. v. FCC, No. 82-1554 (D.C. Cir. 1982). AT&T and the other
intercity carriers initially negotiated the ENFIA agreement under the aegis of the FCC, and
the Commission recently extended these agreements for an additional two years. Exchange
Network Facilities for Interstate Access (ENFIA), 90 F.C.C.2d 6 (1982), review pending sub
nom. MCI Telecommunications Corp. v. FCC, NO. 82-1553 (D.C. Cir.). AT&T filed new
tariffs to implement the ENFIA agreement, but other carriers challenged these
tariffs. The Commission then suspended the tariffs and imposed an arbitrary interim rate until it deter­
mined the proper tariff rate under the ENFIA agreement. Its proposed new action opened
for comments in December 1982.
133. See Walters, supra note 26, at 105-06.
134. See 47 C.F.R. § 76.61 (1982).
135. See supra note 96.
136. Applications of Tel. Cos. for § 214 Certificates for Channel Facilities Furnished to
case, the hard but necessary answer may have to be that the public interest is better served by such unfairness.¹³⁷

Whether the major intra-AT&T structural regulation under the Second Computer Inquiry requiring a fully separated subsidiary for its unregulated business will encourage neutral competition is a debatable issue. A report of the General Accounting Office concluded:

Separate subsidiaries, because they solve little or nothing in themselves, imply a continuing and intensive regulatory effort, including a heavy reliance on the very cost allocation, accounting, and auditing techniques which have proven so troublesome, difficult, and inadequate in the past in their application to traditional rate of return/rate base regulation and as a means of preventing cross-subsidization of competitive offerings. Imposing a separate subsidiary requirement on a dominant firm does little or nothing to alter the incentives of the overall firm or make the incentives of the separate subsidiary significantly different from those of the corporate parent.¹³⁸

The expectation that traditional price/earnings regulations is likely to become unnecessary is overly optimistic in many cases. Simply opening markets for entry does not itself create competition. The danger exists that a regulatory body, enamored with and committed to the structural approach as a means to achieve efficiency, will support “competition by the numbers” by accepting the existence of several competitors as evidence of competition, even though it means maintaining discriminatory and inefficient regulation.

IV. FEDERAL PREEMPTION

The state commissions have been remarkably insignificant throughout the development of the federal structural policies. Although the states intervened, litigated, and testified vigorously at every stage of the process, in not one major instance did they carry

¹³⁸ General Accounting Office, Report to the Congress by the Comptroller General of the United States, Legislative and Regulatory Actions Needed to Deal with a Changing Domestic Telecommunications Industry 107 (1981) [hereinafter cited as GAO Report]. The Report also quotes the Justice Department: “It is clear . . . that the separate subsidiaries concept is likely to have a de minimis impact on remaining incentives to the exercise of market power . . . .” Id. at 108. One of the General Accounting Office’s main conclusions is that reliance on the separate subsidiary approach presupposes continuing internal involvement of the regulatory authorities. This is a conclusion of utmost importance for those who might be tempted to conclude that the present state of competitive development in various sectors of the industry constitutes a justification for withdrawing regulatory safeguards and entrusting these markets to the self-regulating, “invisible hand” of competition.
The pendulum has swung from partnership in a coregulatory regime—at least for wire communications—to overwhelming federal predominance over the regulation of telecommunications. The primary legal weapon that the federal government has used to achieve its position is the doctrine of federal preemption, which precludes local and state governments from taking actions that impair federal policies.139

The FCC has been outspoken in its determination not to let states interfere with its policies. In the 1980 Competitive Carrier proceedings,140 the Commission stated unequivocally:

We do not intend, by concluding that non-dominant communications entities are not subject to regulation as common carriers, to be merely opening the way for state commissions to impose the same kind of regulation. We have found that regulation inhibits the market forces which we believe will best serve federal communications policies and goals . . . . We intend to preclude the states from regulating non-dominant entities providing communications services in competitive markets on an interstate basis.141

In almost all instances the courts have agreed with the Commission.

Thus, in North Carolina Public Utilities Commission v. FCC,142 the court decided in favor of the FCC, which had provided for the interconnection of terminal equipment by suppliers unaffiliated with the local telephone companies. The court held that the FCC’s regulatory authority over interstate communications includes authority over equipment, services, and facilities that are inseparable from intrastate services.143 Similarly, the United States Court of Appeals for the District of Columbia upheld the Second Computer Inquiry decision in Computer and Communications Industry Association v. FCC144 against challenges by state entities, including the California Public Utilities Commission and the National Association of Regulatory Utility Commissioners.145 Echoing


141. Id. at 519.


143. Id. at 793-94.

144. 693 F.2d 198 (D.C. Cir. 1982).
North Carolina Utilities Commission, the court stated: “[W] hen state regulation of intrastate equipment or facilities would interfere with achievement of a federal regulatory total, the Commission's jurisdiction is paramount and conflicting state regulations must necessarily yield to the federal regulatory scheme.” 146

Significantly, the court in Computer and Communications Industry Association upheld the FCC's power to abandon an area of traditional regulatory concern, such as the setting of CPE rates, provided the Commission substituted other regulatory tools. For example, the Commission required the structural separation of regulated and nonregulated activities of AT&T, the dominant carrier. 147 By declaring an affirmative regulatory policy not to regulate an area, the Commission can prevent states from usurping regulatory authority in a particular area. To use the F.C.C.'s jurisdiction, which derives from the regulatory mandate of the Communications Act of 1934, as the basis both for not regulating an area and for excluding states from doing so is an expansive interpretation of preemption. Furthermore, under the appellate court's opinion, the FCC is free to establish new regulatory tools as it deems necessary in the changing telecommunications environment and in each situation it may preclude states from a nonconforming response.

The preemption issue is also present in United States v. AT&T. 148 Judge Greene, in his opinion affirming and modifying the consent decree agreement between the Justice Department and AT&T, found that federal preemption exists even before an actual conflict arises between federal and state actions. 149 In General necticut were amici curiae. See id. at 202.

146. Id. at 214. The Computer and Communications Indus. Ass'n court also found that the FCC's structural policy was not in the nature of an impingement on state regulatory authority: “In Computer II the Commission has [not] attempted to set rates for intrastate communications services or facilities . . . Rather, the Commission here exercised its direct authority to determine the regulatory treatment of CPE used for interstate communications.” Id. at 216.

147. Id. at 219.


149. Judge Greene stated:

The Court must decide the preemption issue at this juncture even though no State has yet taken specific action which conflicts with the terms of the proposed decree. In the first place, many States have made it abundantly clear that, unless the Court acts, they will proceed in a manner inconsistent with the decree . . . Finally, the possibility that provisions of the decree could be vetoed by regulators on a state-by-state basis, with the resulting "balkanized scheme of telecommunications service" (Joint Comments of Alabama, et al., at 12) would obviously have a bearing on the basic question
Telephone Company of California v. FCC\textsuperscript{150} then Judge Warren Burger upheld federal jurisdiction over intrastate facilities used for interstate services. In his opinion for the court he wrote: "Any other determination would tend to fragment the regulation of a communications activity which cannot be regulated on any realistic basis except by the central authority; fifty states and myriad local authorities cannot effectively deal with bits and pieces of what is really a unified system of communication."\textsuperscript{151} Similarly, when the FCC sought to preclude the New York State Commission on Cable Television's asserted jurisdiction over master antenna television (MATV), the Second Circuit upheld the Commission on the ground that state regulation could frustrate the FCC's policy of encouraging interstate Multipoint Distribution Services used in pay television.\textsuperscript{152}

The FCC's string of successes is not unbroken. When the Commission attempted to preempt state regulation of cable television's use of two-way leased channels, the District of Columbia Court of Appeals reversed the Commission in a multiple opinion decision, National Association of Regulatory Utility Commissioners v. FCC,\textsuperscript{153} because the FCC had failed to establish a nexus between the particular communications activity it sought to regulate and its jurisdictional powers over broadcasting.\textsuperscript{154}

V. THE IMPACT OF FEDERAL STRUCTURAL POLICIES ON THE STATES

The redirection of federal regulation toward a structural approach has ushered in a period of difficult adjustment for the states. Their own regulatory priorities, which strongly reflect social policy concerns, have not changed. Affordable residential rates, universal service encompassing low income users and rural areas, and the viability of local telephone companies subject to state reg-

\textsuperscript{150} Id. at 154 n.100.

\textsuperscript{151} Id. at 401.

\textsuperscript{152} New York State Comm'n on Cable Television v. FCC, 669 F.2d 58, 66 (2d Cir. 1982).

\textsuperscript{153} 533 F.2d 601 (D.C. Cir. 1976) (NARUC II).

\textsuperscript{154} Id. at 401.
ulation remain the state commissions' primary regulatory goals. The third of these goals is a prerequisite for achieving the first two objectives, which concern equity and redistribution and reflect the political and historical context for the Commissions' raison d'être. These goals have not changed in the past decade. If anything, their public proponents have become more assertive, and the increased panoply of services available over telephone, coupled with the greater geographical dispersion of population, have made access to telecommunications services more important than ever. For a long time two circumstances contributed to the state commissions' ability to pursue their policy goals. First, technological developments led to a secular decline in the cost of interexchange service, which kept overall rate increases low. Second, long distance revenues subsidized local rates in the procedures known as separations and settlements. Since low income residential customers tend to make relatively fewer long distance calls than do business or higher-income users, the cross-subsidy benefited them. Similarly, the low income residential customers gained from cross-subsidized equipment lease rates.

State commissions were able to maintain their regulatory goals through the use of revenue sources over which they had no control—interstate long distance rates that the FCC established—and through activities such as equipment leasing whose revenues depended critically on market structures and entry condi-


156. Reasons other than redistributive concerns support the concept of universal service. The value of a telephone subscription to each customer rises with the number of reachable parties. Thus, each additional subscriber usually provides positive externalities to the other customers. A purely cost-based charge ignores the positive benefit that the additional subscriber bestows on the system. A cross-subsidy, therefore, is a way in which existing users encourage the participation of other users whose connections in turn contribute to the overall value of the telephone network.


159. In a "separations & settlements" proceeding the FCC determines the portion of interstate revenues that it will allocate to the states. The process has three parts: During "separation" a costing methodology serves to allocate revenues between federal and state jurisdictions. "Settlements" refers to the actual payments from AT&T to the independent telephone companies for the use of their local distribution systems. The apportionment of revenue within the Bell System is called "division of revenues." See Cornell & Pelcovits, Access Charges, Costs, and Subsidies: The Effect of Long Distance Competition on Local Rates, in E. Noam, supra note 4, at 307.
tions that also were susceptible to FCC regulations. The system of coregulation crumbled when the federal level of government, spurred by technological, entrepreneurial, and ideological trends, asserted itself and reshaped the industry structure in which the states operated.

As part of its policy reorientation, the federal government obtained the AT&T divestiture, which resulted in the loss of interexchange service cross-subsidy. The effect that the loss of this revenue will have on local exchange rates and on universal service is difficult to assess because of the many variables involved. The New York State Public Services Commission's estimates show, for example, that, depending on the assumptions relied upon, local rates will increase between 40% and 182%. Commentators frequently make the counterargument that increased access charges, either to the interexchange carriers such as MCI and the remaining AT&T, or to long distance customers, which require access, theoretically can offset dollar-for-dollar any increases in local rates. If state commissions however, seek to adhere to their fundamental redistributional policy of subsidizing residential customers with revenues from large business customers, a serious limit to the policy of increasing access charges arises. An increase in access charges substantially above cost would encourage large users to seek "bypass" technologies as an alternative to local telephone company distribution. Cable television networks, analog or digital microwave systems, in-house private exchanges (so-called class-6 exchanges), and duplicative regular telephone systems are capable of providing local distribution services.


162. See Gioia, supra note 156.

163. See, e.g., Ordover & Willig, supra note 4.

164. For a more detailed discussion of the issue of local bypass, see id.

165. See Noam, supra note 86.


167. A private branch exchange (PBX) is a customer-owned or leased telephone exchange serving an individual organization and connecting to a public telephone exchange.

168. See Capital Tel. Co. v. City of Schenectady, No. 82-CV-468, (N.D.N.Y. 1983) (characteristically protective local regulators prevent approval of new telephone company's
While it is not necessary that bypass technology will be competitive with cost-priced telephone distribution, high access charges may divert a significant number of major business users to long distance carriers via non-BOC routes. Since less than eight percent of all long distance users account for seventy-five percent of all long distance billings, bypass alternatives need attract only a relatively small number of high volume users to divert a major share of the access charge subsidy from local exchange services. To prevent the loss of large scale users—typically business customers—the local operating companies would have to give them rebates; residential customers, therefore, would have to bear a greater share of total cost. The resulting rate increases for residential customers would be difficult for politically sensitive utility commissions to support and would run counter to their goal of affordable rates. In addition, to the extent that the FCC’s access charge policy toward interexchange carriers is uniform and nondiscriminatory—that is, not cost-based and reflective of the Commission’s desire to protect new entrants—the FCC probably will oppose “predatory” access rate reductions by local telephone companies to business users.

Theoretically, state commissions could regulate bypass technology rates to prevent them from attracting much of the local telephone companies’ business. Again, however, the FCC’s policy of protecting entry likely will prevent the states from imposing burdens on new entrants. Indeed, the FCC already has claimed regulatory authority over bypass technologies for local distribution. When the Commission allocated radio spectrum to digital termination systems, it announced its intent to preempt state regulation. Similarly, in *New York State Commission on Cable Television v. FCC* the Second Circuit recognized the Commission’s preeminent interest in regulating Multipoint Distribution Services (MDS) because of the technique’s potential use in local distribution of interstate communications.

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170. See *New York State Comm’n on Cable Television v. FCC*, 669 F.2d 58 (2d Cir. 1982).
172. *Id.* at 389-90.
173. 669 F.2d 58 (2d Cir. 1982).
Aside from the potential loss of revenue from interstate operations, substantial reductions in the states' authority over intrastate interexchange traffic has affected their ability to attain their regulatory goals. In the past, states exercised enough control over this segment to permit them to prevent non-Bell carriers from providing such service. This control no longer exists. Furthermore, rate regulation probably will become administratively difficult because of the numerous cost and revenue allocation problems with nationally integrated companies.

New federal policies also are creating administrative problems for state regulators. Under the old coregulatory system, a state commission needed to focus only on the state BOC and independent operating companies and use their total revenues as the key measure for setting rates. Now, however, state commissions also must regulate the intrastate rates of interexchange carriers such as AT&T. Since these carriers are parts of vast nationally integrated operations, and subject to issues of cost and revenue allocation, states may have difficulty entering this area. One obvious solution is to give the FCC complete authority over intrastate rates. State officials concede that "regulation of all inter-LATA traffic by the FCC makes practical sense since the need for allocations would be eliminated. However, it would effectively preclude a state from the design and implementation of special rate plans, unique peak/off-peak rates, tailored short-haul rates to reflect communities of interest . . . ."

Another administrative problem that the states face is the temporary absence of historic data for the new BOC structure to serve as a basis for evaluating rate cases. Similarly, both the BOCs and the state regulatory commissions will have difficulty forecasting access revenues, which are dependent on interstate and inter-LATA carriers actions.

175. See Gioia, supra note 155.
176. Id.
177. As two New York State Public Service Commission officials have described the problem:
   Unlike the situation today where most functions and costs are self-contained within a BOC and within state boundaries enabling direct identification of expenses and plant dedicated to state services, AT&T will have no such definable territory and it is doubtful if many elements of cost will be incurred strictly on behalf of a given state. As a result, complex, arbitrary and disputed cost allocation procedures will be required to identify or apportion costs to a particular state jurisdiction.
Defining the scope of federal and state authority over interexchange and intraexchange services will raise not only jurisdictional issues, but also questions concerning the characterization of certain services as interexchange or local. The principle behind the 1982 AT&T divestiture decree was to separate interexchange and intraexchange services. In reality, the distinction between the two types of services often is not clear. For example, the FCC tariffs and defines certain services such as message toll telephone service (MTS) and wide area telephone service (WATS) as interexchange services, while it identifies and prices private line foreign exchange services (FXs), which permit users to place local calls through a distant switching center, as local services. No functional difference, however, exists between the interconnection arrangement for FXs and WATS customers. To avoid distortions, access charges for both types of services must be similar. Federal-state coordination, or more likely, FCC predominance over all access charge regulation probably will be necessary to achieve consistent rates.

Similar problems may arise in the terminal equipment and enhanced communications services areas. Under the Second Computer Inquiry decision the FCC ordered the removal of CPE charges from state tariffs and entirely preempted state regulatory authority over CPE. The resulting unbundling of CPE charges and regulated basic transmission charges caused states to lose control over revenues from terminal equipment that could subsidize local rates. The FCC decision also imposed an administrative burden on the states by requiring them to separate enhanced services from basic transmission services. Although the Commission per-

179. See United States v. AT&T, 552 F. Supp. at 141-42.
180. Message toll telephone service (MTS) is a long distance communications service permitting subscribers to locate exchange services in separate areas to establish two way telecommunications on a message-by-message basis. Wide area telephone service (WATS) permits telephone users to place an unrestricted number of calls in specific areas at a single overall rate. See Trebing, supra note 98, at 132.
181. See United States v. AT&T, 552 F. Supp. at 161 n.124.
182. Id. at 161.
185. Under the FCC's Second Computer Inquiry decision, which preceded the AT&T divestiture agreement by two years, basic transmission services, whose intrastate aspects the states regulated, were to be separate from enhanced services. The supervision of the separa-
mits the states to regulate the latter services, it forbids them from setting rates for the entire range of enhanced telecommunication services. In addition, the FCC has authority to set the dividing line between the two types of services and alter it as technology develops. Thus, the scope of state regulation is within the not necessarily consistent hands of the federal agency. Furthermore, by giving AT&T and its fully separated subsidiary, rather than the BOCs, authority to provide enhanced services, the FCC has limited the possibility that revenues from these services can subsidize local rates. Rather than helping to subsidize state-set basic residential rates, enhanced services will contribute only to the revenues of the parent company outside of state rate-of-return regulatory authority.

The burden on the state regulators and the pressure on local rates are likely to increase because of the changes in the accounting treatment of depreciation. AT&T successfully petitioned the FCC to adopt new depreciation rules that permit speedier cost recovery by allowing the use of the “equal life groups” depreciation method rather than the “vintage groups” method. Similarly, the FCC replaced the whole-life straight line depreciation system with remaining life depreciation, and adopted a reassessment of service life. In addition, these changes allow a telephone company to depreciate more rapidly, which normally justifies an increase in local exchange rates to offset the added cost. The changes do create difficulties in administration. A report by the General Accounting

Computer Inquiry, 77 F.C.C.2d at 428-30. The AT&T divestiture agreement changed this arrangement by authorizing AT&T, not the BOCs, to provide enhanced services and to own embedded CPE. United States v. AT&T, 552 F. Supp. at 192. Hence, the states must regulate AT&T rather than the BOCs in the latter two areas. Under the original divestiture decree, the BOCs could not enter markets other than regulated basic exchange service. Id. at 138. Therefore, the state commissions did not need to supervise or separate any unregulated competitive services. Judge Greene, however, modified the decree to permit BOC entry into CPE marketing, which is a competitive service that the state does not regulate under Second Computer Inquiry. See id. at 191-93. The question thus arises within what kind of separated structure a BOC can provide CPE services. The FCC probably will examine the logic of the Second Computer Inquiry full separated subsidiary approach as it applies to the divested successor companies and will adopt a similar arrangement for BOCs. Under this approach, the state commissions would bear the regulatory burden of separating CPE from intrastate exchange services.

186. Second Computer Inquiry, 77 F.C.C.2d at 430.
187. See Computer & Communications Indus. Ass'n v. FCC, 693 F.2d 198, 204 & n.12 (2d Cir. 1982).
188. See supra note 185.
189. See Trebing, supra note 98, at 145.
190 See id.
Office\textsuperscript{191} describes the difficulties that the new depreciation rules present, including problems in gathering data, the need to rely on hypothetical engineering judgments, and the questionable ability of state commissioners to check and monitor the accuracy of depreciation accruals.\textsuperscript{192}

VI. Outlook

If federal goals and actions have dominated the recent history of federal and state division of responsibility in the regulation of telecommunications, what is the outlook for the near future? To attempt an answer, of course, is to invite speculation.

The strict separation of the BOCs from competitive services is intellectually consistent with the theory underlying divestiture, but its success may sow the seeds of its own destruction. With the BOCs precluded from the major areas of new technological applications, with bypass technologies nibbling at their most profitable customer base, and with political and economic forces constraining their ability to obtain rates that adequately compensate them for the loss of the interexchange subsidy, the BOCs may well deteriorate financially, even with increasing rates. State regulators conceivably might take this opportunity to circumvent or modify the strictness of the structural regulation. For example, the state regulators may attempt to redefine local exchange areas (LATAs) to make the BOCs essentially into intrastate interexchange carriers. The states may also attempt to permit BOC entry into enhanced services, either by imposing lenient tariff restrictions on their activities, or by allowing BOCs to create separated subsidiaries ostensibly to market CPE but with considerable leeway to enter other activities. The BOCs undoubtedly would prefer these measures to a free market that they could not enter. The state may have incentive to increase the scope of price/earnings regulation in order to circumvent the structural restrictions. In addition, state commissions may resort to approving sophisticated forms of price discrimination, including discounts to large users of local exchange access to promote utilization of local exchange facilities instead of bypass alternatives.\textsuperscript{193} This price discrimination would favor AT&T at the expense of its competitors and would be the diametric opposite of the FCC's policy, which seeks to encourage the en-
try of competitors. Eventually, the BOCs' revenue plight with its
distributional implications, and the companies' willingness to com­
peete actively in other markets, may lead to removal of restrictions
and BOC reentry into many of the markets that the FCC currently
has allocated to AT&T. In that event, the segmental separation
approach of the FCC and the Justice Department largely will
break down—as it must with increasingly integrated technology. In
its place will be a genuinely free entry policy, coupled with traditio­
tional price/earnings and common carrier regulation in those areas
of residual core natural monopoly that may persist for a long time.
An ample role for state regulation exists in such a system, unlike in
the deceptively simple world of separated markets that underlies
today's federal regulatory policy.

In the short run the logic of the FCC's structure policy is
likely to lead to a further restriction of local and state governmen­
tal authority. Cable television presents an especially illustrative ex­
ample. In this area the Commission already has set a ceil­ing—currently five percent of revenues—on the local govern­
ments' ability to impose franchise fees on cable systems. Indeed, this
restriction, which also limited the ability of localities to impose
mandatory channel requirements, became part of a recent Senate
bill introduced by Senator Barry Goldwater, normally a champion
of home rule and states' rights.

The trend toward increased federal restrictions on local and
state authority is not entirely surprising. A fundamental conflict
exists between the goal of deregulation and the goal of decentrali­
zation. If the primary federal aim is to reduce interferences in der­
egulatory policies, the federal regulators must prevent noncon­
forming state or local policies. They likely will do so through
preemption challenges to state and local actions. The next target
no doubt will be Satellite Master Antenna Systems (SMATVs),

194. The FCC explicitly limits franchise fees to 3% of gross revenues but will permit a
fee of up to 5% upon a showing by a municipality that this amount "will not interfere with
the effectuation of federal regulatory goals" and that the fee is appropriate "in light of the
planned local regulatory program." 47 C.F.R. § 76.31 (1982).
6, 1981).
196. The Supreme Court's recent decision in Community Communications Co. v. City
of Boulder, 455 U.S. 40 (1982), further eroded local powers over the regulation of telecommunica­tions. The Boulder Court held that absent a grant from the state, local governments
are not exempt from the antitrust laws. Id. at 56-57. Thus, additional cable companies con­ceivably could enter selectively into an existing cable area and weaken the franchise con-
which are small cable television operations with access to many of the same satellite-fed pay programs. Because these systems do not cross public property, at present they do not require a municipal franchise and are not subject to the various requirements, such as universal service, rate regulation, and public access channels, that local regulators impose on cable operators. SMATV systems thus are able to undercut local regulation by underpricing the regulated cable operators. Local governments are beginning to consider imposing obligations on the SMATV systems, while the FCC views this plan as a restriction on the entry of a new technology. In *New York State Commission on Cable Television v. FCC*, which concerned a closely related issue, the Second Circuit prevented the state from extending its jurisdiction to MATV, a variant of SMATV, using interstate MDS. If courts extend the principle of this case to local SMATV regulation, the states may find it difficult to maintain their various redistributory and access goals for cable franchises. Again, the federal efficiency goal of encouraging additional entrants may preempt the lower governments’ equity concerns even though the new entries, as such, are not necessarily more efficient.

If the new entrants are less efficient than the firms already in the market, a fundamental irony exists. The success of the FCC’s policy of entry rests on the presence of new entrants. Yet some of these entrants may exist or survive largely because of the equity centered, “nonefficient” concerns of state and local regulators. If these regulators were to adopt the federal efficiency goals entirely the underlying cost structures in several telecommunications markets could result in monopolistic conditions. Monopolization, in turn, would likely lead to a reemergence of more traditional forms of conduct regulation such as price/earnings restrictions. Therefore, the present system of federal and state regulation probably is not stable. If states abandoned their policy aims in favor of the federal goals, they would greatly weaken federally inspired entry of interchange carriers such as by pass carriers, MDS, and SMATV. The success of federal policies thus depends to some extent on the states’ maintenance of rate regulation that cross-subsidizes high cost users with proceeds from low cost users.

While in the traditional coregulatory system federal forbearance made achievement of state goals possible, the converse is true today. Now the states, by their adherence to equity goals, provide