The Benefits, in Theory and Practice, of State Regulation

Sharon Megdal

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Columbia Institute for Tele-Information Graduate School of Business Columbia University 809 Uris Hall New York, NY 10027 (212)854-4222

THE BENEFITS OF STATE REGULATION

Sharon B. Megdal MegEcon Consulting Group

Most agree that predivestiture regulatory practices are not appropriate for the postdivestiture U.S. telecommunications industry. There is disagreement, however, as to how to effect the necessary modification of regulatory procedure. This disagreement has been evident among economists and regulators alike. Underlying the debate has been the structure of regulation established by the Communications Act of 1934. State authorities are charged with regulating intrastate communications, and federal authorities regulate interstate communications, with some preemptive powers.

The courts, charged with upholding existing laws, have influenced the debate significantly. Judicial actions have not only determined industry structure, they have limited both state and federal regulatory authority. Telecommunications regulation is accomplished through a marbled structure. Federal and state actions intertwine to determine (at least in part) telecommunications offerings, rate schedules, and profits. The current system of shared regulation is criticized for its cost, complexity, inertia, and contentiousness. A key question is: What is the appropriate regulatory model? Is it a fully deregulated environment or a partially regulated environment? If the industry is to be partially regulated, the likely scenario for some segments of the industry for the next several years, who should do the regulating? Do the states still have a useful role to play? This chapter focuses on the last question, assuming a fully deregulated environment is still several years away. It is also assumed that the system of regulation will involve federal regulation; that is, a system of only state regulation is not an option.

A RATIONALE FOR A MARBLED STRUCTURE

There are three elements of the role of government in a market economy—stabilization, income distribution, and resource allocation. Analysis of the stabilization function of government is central to macroeconomic policy. Discussion of the proper role for government in (re)distributing income is inherently normative. This role for government has some relevance to regulatory policy designed to promote universal service, but it is not be a focal point of this chapter. Examination of the role for government in resource allocation, on the other hand, involves significant positive economic analysis and has direct bearing on the issue of the appropriate jurisdiction for telecommunications regulation.

There are three fundamental situations where government intervention may correct for the failure of private markets to allocate resources efficiently: public goods, externalities, and natural monopoly. The means for correcting these problems are the subject of much scrutiny. Relevant to the topic in hand is the potential for government regulation to correct for market failure due to natural monopoly.

The economic theory of fiscal federalism, perhaps best espoused by Oates (1972), further argues that centralized government is most appropriate for carrying out the stabilization and income redistribution functions. The best level of government to correct for market failure, it is argued, depends on the nature of the situation. For example, when dealing with a national public good, such as defense, it is most appropriate for the federal government to intervene. In dealing with more local public goods and externalities, the efficiency gains from a less centralized approach may outweigh any cost savings associated with central government involvement. If, however, tastes are uniform across jurisdictions, a centralized approach may be appropriate. A uniform or centralized approach, however, will not take into account geographic diversity in tastes or technology. The policies of subnational governments can incorporate diversity. Moreover, local government activity will result in competition among jurisdictions and more policy innovation.

As noted by Representative Edward Markey (1990), "Congress must set a consistent, timely, and comprehensive national telecommunications policy, a policy that ensures the principles of universal service, diversity, and localism—the cornerstones of the Communications Act and the foundation on which the world's greatest telecommunications network was built (p. 1).

When regulation of telecommunications involved setting prices and profits for providers of "plain old telephone service," most Americans received service provided by AT&T. The network was truly a national network, and rates were determined by both federal and state regulators. In the current environment, the network is still effectively a national network in that it is seamless from the user's perspective, but there are multiple owners of the network and there may be parallel networks. The long-distance market is characterized by competing companies providing parallel networks, with a commonality being their connection to the local network. The local network is largely characterized by monopoly ownership of nonduplicated facilities that serve millions of customers over several

jurisdictions. Rates are still set by federal and state regulators, often operating according to laws that were established in the old environment.

The ownership and structure of the U.S. telecommunications network are unique. The current industry structure presents challenges to those charged with developing appropriate regulatory policy. There can be no doubt that telecommunications services and infrastructure are vital to our nation's prosperity and competitiveness. Does the marbled system previously described no longer serve the public well? Is federal regulation superior to the marbled structure of regulation? Is state regulation an anachronism?

An evaluation of the alternative models for regulation must be conducted in the context of policy goals. Although establishing the goals may involve controversy, let me suggest four goals against which regulatory policy can be gauged:¹

- 1. Provision of appropriate customer safeguards.
- 2. Incentives for efficiency and innovation.
- 3. Facilitation of competition.
- 4. Reasonable administrative burdens and costs.

The first goal, provision of appropriate customer safeguards, is a very broad one. When access to the local network is provided under largely monopoly conditions, it requires that there be safeguards for retail customers and for competitors who may rely on local exchange company (LEC) services in order to provide service or compete with the LEC. The protections may relate to prices, service quality, conditions of service, and complaint oversight. The second goal recognizes that it is important for the regulatory environment to encourage or at least not inhibit technological efficiency and innovation. The third goal acknowledges the importance of the competitive process and the necessity to facilitate or at least not impede the emergence and development of competition. Although competition may not always be an end in and of itself, the competitive process should allocate resources wherever feasible. Though regulatory costs may be difficult to gauge precisely, they are significant. It would be desirable to reduce them, without substantially sacrificing other regulatory goals.

At a theoretical level, let us consider a regulatory model where all telecommunications regulation would be carried out at the federal level. Regulation of interstate services at the federal level would continue as before, but now regulatory policy for intrastate services would be set nationally. Certainly all the benefits of the current system of federal regulation would continue. Quality and interconnection standards could be set uniformly for the nation. There would be some noticeable changes in the regulation of intrastate services, as the stringency of regulation would be uniform. Service offerings would not depend on individual

¹See Megdal and Lain (1988) for a more complete discussion of these goals in the context of state regulatory reform initiatives for local exchange companies.

state regulatory policies. For example, intraLATA competition would either be allowed everywhere or prohibited everywhere. The availability of a service, such as AT&T's Megacom service, would not be limited by a single state's refusal to approve it.

Because telecommunications services are provided by private businesses, the central regulator could not impose uniform national prices for local service. The federal commission, if it chose to regulate prices at all, could continue the practice of establishing rates (or limits on rates) for each state. Perhaps there would be an effort to impose uniform prices for an entire regional holding company or interexchange carrier. This approach would be less costly to administer but, to the extent costs vary across the states served by a single company, would result in greater deviation of price from cost. At issue, then, is the institutional structure for policy determination and oversight. One option is a massive federal bureaucracy, located in Washington, that would handle all policy matters. An alternative is the creation of state or regional field offices that would conduct the business of regulation, following centrally determined policies and procedures. The administrative costs would also depend on the hearing practices of the federal regulators. A common administrative practice at the state level is the hearing process. This involves both public hearings, where the public can participate, and administrative law proceedings. If the centralized regulatory authority were to dispense with such hearings on state-level matters, administrative costs would be reduced considerably, at the expense of the ability of some to participate in the process. Would the administrative costs associated with the centralized approach be any lower than with the current decentralized approach? They could be, but it is not clear that they would be. Although it may be tempting to conclude that one bureaucracy is cheaper than 50 bureaucracies, federal rules and requirements can be very costly to administer. In addition, there are economies of scale to state regulatory commissions, as they regulate more than one industry. Therefore, the relative administrative costs are not clear.

It would be expected that centralized regulation would effect a uniform approach to product introduction, pricing, profit oversight, and competition. This uniformity has advantages and disadvantages, which depend on the appropriateness of the federal policy and the variability in conditions across the nation. For example, the federal policy could be inappropriate for current market conditions and allow a monopoly provider of essential services to price without constraint. This could be the case nationally or on a more regional level. Federal regulators could, on the other hand, continue strict price regulation for services subject to competition and impede the competitive process for the nation as a whole. A uniform regulatory policy that ignores the incentive problems associated with traditional rate-of-return regulation could likewise be problematic. Moreover, federal policy could be subject to variability in approach, depending on the policy goals of the current administration. Although some actions cannot be undone, it is clear that reregulation of deregulated entities or services is not out of the

question. Certainly, a uniform national policy that is appropriate to market and industry conditions nationally would be superior to a fragmented approach that does not provide proper incentives for efficiency and innovation or does not facilitate competition sufficiently. Again we see that, in terms of the first three goals, federal regulation is not necessarily superior and may be inferior to the current marbled system of regulation.

Because we have not operated with only federal regulation of the telecommunications industry, we do not know how much flexibility Congress would extend federal regulators under this alternative approach. The recent experiences of the savings and loan and cable television industries suggest that Congress will attempt to intervene when regulatory problems are perceived. Associated with the creation of the Resolution Trust Corporation was a massive bureaucracy. Cable television regulation has been reintroduced. Replacement of state regulation with federal regulation involves some significant uncertainty as to the autonomy the federal regulatory authority would be afforded.

Theoretically, therefore, it is not clear whether the centralized approach to regulation is superior to the current marbled system in terms of the four goals enumerated earlier. Finally, a centralized approach would not provide the laboratory that 50 states do.

THE STATES AS LABORATORIES

If theory is unable to provide us with clear guidance regarding the preferred approach to regulation, what can experience under the marbled structure tell us? The current system of regulation is an imperfect and evolving process. It has, however, revealed much to us. Although some would complain about the pace of change, state regulators have responded to the call for regulatory reform. In the 1980s, while the FCC was talking about deregulation, states were doing it. States were performing their laboratory function. Several states, observing a more competitive long-distance market, quickly lessened restraints on AT&T. Alternative approaches to regulating local exchange carriers were advocated, debated, modified, and adopted.

For example, in NYNEX territory, the New York approach to incentive regulation was implemented simultaneously with the social contract approach of Vermont. In response to the perceived needs of each state, two very different regulatory methods were adopted for units of the same company. The Vermont approach required statutory change and represented a more radical departure from traditional practices than did the New York policy. For a 3- or 4-year period, the Vermont policy eliminated rate-of-return regulation, capped basic service prices, allowed pricing flexibility for competitive and nonessential services, and required digital switching throughout the state. By eliminating profit oversight entirely, Vermont offered New England Telephone significant incentives to operate efficiently and market effectively. Pricing flexibility gave the company the

tools by which to compete and market its products. The investment program recognized service quality issues, and through the cap on basic rates and other provisions, customer protections continued. New York continued rate-of-return regulation, but allowed for some upward flexibility in earnings. At the same time, New York Telephone promised not to seek any general rate increases for a set period of time. The New York approach, by allowing the company to keep earnings above the traditional level, provided incentives for efficiency and innovation. Unfortunately, by not incorporating any pricing flexibility, the plan limited the tools the company could employ to improve its earnings. Both approaches served as models for other states.

In U S West territory, different policies were advocated. A push toward service-by-service deregulation and pricing flexibility was made at the same time one U S West state, Nebraska, enacted far-reaching deregulation legislation. The service-by-service approach relaxes regulation for particular services. Services might be deregulated, where the service's price is no longer regulated (except perhaps for a requirement that price cover incremental cost) and the service's costs are separated from the regulated rate base. Alternatively, pricing flexibility would be accomplished through detariffing, where prices could be changed with minimal notice, but the service's costs are not separated from the regulated rate base, and revenues from that service are included in the company's allowed revenue requirement. Other pricing provisions include flexibility within established bands or discounts from tariffed rates. The Nebraska approach was unique in that it removed nearly all commission authority to review profits and rates for the state's largest local exchange carrier.

Other regional holding companies were not as quick to introduce proposals, but when they did, they and their state commissions often were innovative. For example, California became the first state to adopt an index approach for pricing basic local service, similar to the formula adopted by the FCC for AT&T. The California plan continued profit oversight, but included provisions for the sharing of earnings above an authorized level. Kansas, like Vermont, abandoned rate-of-return regulation for the duration of an alternative regulation trial. In Kansas, basic service prices were frozen for a 5-year period, and pricing flexibility was allowed for a limited set of services. Network investment was also required. Other states have, for an established period of time, combined pricing flexibility for competitive or nonessential services and earnings sharing with a freeze on the local service prices. Changes in the approach to state regulation of long-distance carriers have evolved simultaneously.

Clearly, the major challenge for state regulators over the next decade is continuing appropriate reform of local exchange carrier regulation. States are reviewing and revising their alternative regulation plans. Legislatures are changing the statutory rules for regulation. In response to legislative changes and an application from New Jersey Bell, New Jersey regulators replaced the 1987 Rate Stability Plan with a much more comprehensive, longer term plan that combines

significant protections, deregulation of competitive services, and a long-term program of infrastucture investments.

Data from different types of regulatory regimes will be available for analysis. A uniform federal policy would not provide such variation in data. For example, the sharing provisions included in state incentive plans vary considerably from state to state. In some states, the sharing is based on the rate of return on equity. In others, it is based on the rate of return on investment. Some sharing is closed-ended, meaning all earnings above an established rate of return are returned to customers. Other sharing is open-ended. Some sharing formulas are tapered, with the share of "overearnings" that is returned to customers decreasing as the earnings increase. In other cases, just the opposite occurs. Yet others share at a constant rate. Some plans allow the filing of a rate case if the rate of return falls below some level; others do not. Company performance under these alternatives will provide data about the relative effectiveness of the alternative approaches in encouraging efficiencies and innovation.

Variation in the extent of pricing flexibility across states will likewise provide information about the effect of less stringent regulation on market performance. Economists, who advocate that market forces be allowed to operate, will have data to analyze from a variety of approaches to regulating service prices. Perhaps it will be discovered that markets for some services are less competitive than predicted.

As solutions to some problems were formulated, other problems emerged. For example, it was observed that competition among alternative operator service providers for hotel business did not necessarily translate into alternative service providers for the end user. Commissions learned, in other words, that all competition is not created equal. Moreover, what seemed like solutions at one point in time did not work as intended. The New York experiment with rate case moratoria and incentive regulation did not perform without problems. The U S West service-by-service approach to deregulation has been re-evaluated. Other policies are still under evaluation or development. Experience with long-distance deregulation, on the other hand, has generally been favorable.

State regulation is a frequent object of complaint, but it can serve as a convenient ally. While companies groaned about the shackles of regulation, the shackles were being unlocked. Note that the operating companies that made up AT&T did not worry about the incentive effects of rate-of-return regulation—something with which economists have always been concerned—when AT&T was a monopoly provider. State regulation allows for observation of outcome under different policies. It is unlikely that the public would tolerate such differential treatment from a federal agency.

The states have indeed served as laboratories and will continue to do so. Unfortunately, the benefits of these field experiments are difficult to measure, but I believe they are significant. The costs of mistakes at the state level are not as significant as national mistakes would be. As already discussed, a decentralized

approach to policymaking can result in greater policy innovation. Whereas some state regulators have chosen to wait for and respond to regulatory reform proposals, several have actively shaped the debate both locally and nationally. We do see competition among jurisdictions. Regulators and industry strive to develop policy that is most appropriate for their states. They seek to learn from the experiences of other states to incorporate features that have desirable effects and avoid including those that do not.

Competitiveness is a concern at both the state and federal levels. Urban areas tend to be served first by state-of-the-art technology. Extension of such service to more rural areas has been slower. Some states have been slow to allow investment in advanced technology in the rate base if, for example, the investment could not be recovered from revenues on an individual switch basis. They have required each switch to recover its costs, averaging other costs over different locations. At the urging of companies and on their own motion, some commissions have recognized that minimum acceptable basic service requires modern technology. Modern switching and transmission are essential for economic growth. Whereas up-to-date technology cannot ensure economic growth, its absence can effectively preclude business development. The availability of current technology is not limited to larger businesses. It is important to residential and small-business customers, as more commercial, educational, and informational activities are accomplished via the telecommunications network. Several state policies have incorporated network improvement and investment programs. State regulators are more likely to be responsive to the particular state's investment needs. For example, regulators in Vermont and Idaho were very interested in the network investment provisions of alternative regulatory plans. It is unlikely that purely federal regulation could incorporate these differences.

It must be acknowledged that each state "experiment" is not independent of others, making accurate policy assessment difficult. Large telecommunications companies may serve as many as 50 or as few as 2 states. Service providers may want their behavior in one jurisdiction to influence regulatory decisions in another. For example, Nebraska has essentially deregulated the provision of most telecommunications services. There, the market actions of U S West may be limited not by the regulatory environment of Nebraska, but by the company's desire to achieve certain regulatory goals in the other states it serves.

The actions of AT&T in one state are likely to depend not only on the regulatory environment in that state, but on the company's regulatory goals in the other states. For example, most state regulators favor the continuation of statewide averaging of long-distance rates. Recognizing this, AT&T is more likely to agree either to regulations that ban deaveraged rates or to voluntarily refrain from implementing such rates.

In summary, the states *are* laboratories. The experiments, however, are not controlled, and the outcomes not always easily quantified, at least over the short term. The lack of independence of company action across the states further

complicates assessment of the benefits of state regulation. Yet, state regulation is not without its significant problems: It may impede the competitive process and interfere with the national availability of some services; it is costly; proceedings are often duplicative; and jurisdictional separations of authority are made that are arbitrary from the customer's point of view. For example, most customers think of calling in terms of local versus long distance. It would be difficult for many to understand why intrastate long-distance calls can be more expensive than interstate long-distance calls that travel over longer distances. Variation in policy across states can lead to fragmented investment and planning.

Theory could not answer the question of who should do the regulating. Unfortunately, practice cannot provide a clear answer either. It is easy to list a set of grievances against state and federal regulation and conclude that the system is in need of overhaul. Such a litany would surely elicit defensive responses by the target of such complaints. Responding by pointing out that regulation worked well for 50 years is not particularly helpful, though, when the current industry structure is quite different from what it was 50 years ago. Regulators at both levels are attempting to be responsive. It is not surprising that they have not figured out an optimal strategy, because there is none. As in most policy matters, trade-offs are necessary. Nevertheless, at the state (as well as the federal) level, we see actions designed to encourage efficiency and innovation, facilitate competition, and reduce administrative burdens, while continuing appropriate customer protections.

WHO WILL DO THE REGULATING?

The marbled system of regulation is imperfect, but it is likely to continue until there is greater dissatisfaction with the current system. Frustration will remain with regulatory pricing practices. Government policy involves trade-offs. Efficiency may be the prime concern of economists, but it is only one concern of most policymakers (and likely not of concern at all to others). The industry itself, when the industry and AT&T were virtually one and the same, was largely unconcerned with efficiency. The configuration of prices was an issue that was secondary to promotion of universal service and recovery of the revenue requirement. Regulators have been educated over time as to the importance of cost-based prices. In fact, they have been educated so well that they are now concerned when, under relaxed regulation, service prices exceed costs.

For the telecommunications industry, the transition from regulation to competition continues. It is imperative that jurisdictional battles not impede the development of necessary infrastructure and services. Telecommunications policy is a good example of a public-private partnership. Ownership of the network is private, but many of the services provided are of national concern. Policy coordination is needed. The state hearing rooms should not be used to determine

national policy in a fragmented way. For example, the ability of telecommunications companies to provide information services should be determined at the federal level, with input from all concerned, including the states. State regulation and nationally coordinated policy should not be mutually exclusive.

For all intents and purposes, universal service has been achieved. Targeted policies for dealing with the inability of some to afford telephone service have been developed. Localism and diversity, the other cornerstones mentioned by Markey, have also been achieved. Diversity of services and suppliers exist. State regulation has ensured a local approach to and diversity in policymaking. It should be acknowledged that, in recognition of the changed industry structure and the importance of telecommunications to our economy's growth and competitiveness, the laying of new or additional cornerstones may be necessary.

The distinction between local telephone companies and other providers of telecommunications and multimedia services is becoming blurred by corporate acquisitions, mergers, and restructurings. For example, in 1994 Bell Atlantic attempted to acquire Tele-Communications, Inc., the largest cable TV company in the United States: U S West purchased a 25.5% share of Time Warner Entertainment, and NYNEX has been a partner in the takeover of Paramount by Viacom. Ameritech and Rochester Telephone have each put forward proposals that would to allow themselves and others to compete as equals in the marketplace. Competitive access providers and others are providing or planning to provide local service.

Until local telephone competition is pervasive, however, telecommunications regulation will be a reality. As competition increases, regulatory reform will continue at both the federal and state levels. It is important to be realistic about just how far that modification can go in the near term. Policy changes as significant as moving to a system of only federal regulation of telecommunications will result from more than the wistful desires of economists or those who are regulated. It must be remembered that acceptability of any change in policy depends on policies already in place. When the airline industry was deregulated, basically one federal agency was involved. We have an established system of state regulation already in place. One prerequisite for significant change is public dissatisfaction.² Does that dissatisfaction exist? Is it likely to develop? In the near term, I do not think so, as service quality is perceived to be good and prices for essential services are considered reasonable. The states will continue to be important players in the regulatory arena.

²Another is a court ruling! I recognize that the public did not clamor for the breakup of AT&T.