The Road to More Intelligent Telephone Pricing

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The transformation of interexchange telecommunications from a regulated, franchised monopoly to an unregulated, competitive industry has been under way for a quarter century. AT&T now faces competition in almost all of its intercity markets, including residential toll calling, and the local operating companies face the prospect of partial displacement by a number of emerging alternatives to the wired exchange network.¹

It is probably a sign of good mental health that we seem to be spending little time looking back and asking ourselves whether the course on which we have embarked in telecommunications is the right one. The question is not only impossible to answer with any assurance, it is also irrelevant. Further movement toward freer competition is inevitable, at least for the foreseeable future.² While I "estimate" a small but positive probability that ten or twenty years from now we will look back and conclude that the entire venture was a ghastly mistake,³ I am convinced that this

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¹ Prominent among these are direct links to large users via various combinations of microwave, coaxial and fiber optic cable, and satellite, provided either by the users themselves or other common carriers.

² Historically, rapid and dramatic technological advances, both in communications and the use of communications, have made movement toward greater competitiveness inevitable. Once we had microwave technology, which opened the door to private microwave systems, then the decision in Allocation of Frequencies in the Bands Above 890 Mc. (Above 890) 27 F.C.C. 359 (1959), modified, 29 F.C.C. 825 (1960) (allowing customers to construct and operate their own facilities for private, point-to-point telecommunications, bypassing the telephone company network altogether), was probably inevitable. Once we had private carriage, then "specialized" competitive common carriers followed. The activities of these carriers were sanctioned in Microwave Communications, Inc., 18 F.C.C.2d 953 (1969), reconsid. denied, 21 F.C.C.2d 190 (1970) (permitting MCI to sell private line service in direct competition with the telephone company), and Specialized Common Carrier Servs., 29 F.C.C.2d 870 (1971), aff'd sub nom. Washington Util. & Transp. Comm'n v. FCC, 513 F.2d 1142 (9th Cir.), cert. denied, 423 U.S. 836 (1975) (competition in the private line market has no adverse technical or economic effects on the telephone network and will only benefit consumers). And once those decisions were in place, the competitive offering of general toll service became inevitable. This service received judicial approval in MCI Telecom. Corp. v. FCC (Execunet I), 561 F.2d 365 (D.C. Cir. 1977), cert. denied, 434 U.S. 1040 (1978), and MCI Telecom. Corp. v. FCC (Execunet II), 580 F.2d 590 (D.C. Cir.), cert. denied, 439 U.S. 980 (1978) (MCI can offer "Execunet" service, billing subscribers on a per call basis, with minutes of use and distance called determining the charge, in addition to flat-rate private-line service).

³ We may one day raise similar questions about the AT&T settlement, infra note 6, although I doubt we will alter our present, apparently close to unanimous, approval of its having let AT&T out
probability can be reduced substantially by the adoption of intelligent pricing policies by telecommunications companies and their regulators.

I begin, in Section I, with a description of the features of an efficient pricing system and of the inefficiencies of present pricing policies. Section II appraises various qualifications and reservations to the preceding argument—some of them defensible, others that can be characterized only as demagogic. Section III describes how recent developments in the courts and at the FCC have already set in motion a transition to more efficient pricing policies, which have in turn given rise, predictably, to political resistance and efforts to hold back the clock. Sections IV and V deal, respectively, with possible solutions to the practical and political obstacles that companies and regulators will undoubtedly encounter, indeed themselves construct, as the transition proceeds.

I. The Inefficiency of Present Pricing Policies

A. Features of an Efficient Pricing System

Economic efficiency requires that services be priced at their marginal costs.4 A telecommunications system incurs two types of costs. The first are the costs associated with merely connecting a customer to the network; because they are not affected by how much he then uses the system, they are characterized as non-traffic-sensitive.5 Traffic-sensitive costs, in contrast, are generated by the customer’s usage of the system and vary with, among other factors, the time and duration of usage, the distance traversed by the call, and whether the call is intra- or interexchange.6

5. Recently, some witnesses before state regulatory commissions have proffered demonstrations that for various, largely historical reasons the costs of subscriber access systems do vary—or have varied—positively with usage. See especially the testimony of Dr. John W. Wilson before the Missouri Public Service Commission, Southwestern Bell Tel. Co. Case Nos. TR-83-253/TR-83-288 (1983). It is impossible to do justice to the controversies over these assertions, except to observe that they are controverted by telephone company engineers. Moreover, they rest primarily on assertions about the ways in which costs that are now sunk were incurred in the past rather than about marginal costs, which are entirely forward-looking. See my rebuttal of Wilson, id.
6. “Interexchange telecommunication” means telecommunication between a point located in one exchange area and a point or points located in a different exchange area. “Intraexchange telecommu-
Assuming metering costs are not prohibitive, an efficient telecommunications pricing system would therefore charge each user a two-part tariff. One part would be a fixed access charge (levied either as a lump-sum or on a periodic basis), which would cover only the marginal non-traffic-sensitive costs of connecting the customer with the existing system. Such a charge would vary substantially among customers depending on their locations and on other factors that may cause those costs to differ. The second part of the tariff, related to traffic-sensitive costs, would vary with the customer’s usage of the network and would reflect the mix and duration of intra- and interexchange calls and the times the calls were made.7

B. Present Deviations from Efficiency

A comparison of present telecommunications pricing policies with the foregoing principles uncovers three major sources of inefficiency.

First, both access and usage rates are in large measure averaged over a number of subscribers. They therefore do not reflect individual geographic, temporal, or other factors that cause true access costs to vary among customers. (Consider, for example, the difference between the marginal costs of plugging in a phone for a new resident in an existing urban apartment and of extending telephone lines and inside wiring to a newly-built, isolated rural home.) Nor do local or long-distance rates reflect the very large differences in the usage-sensitive costs of calls between persons in different locations.

Second, a large portion of the costs of providing access to the telephone network is recovered in charges for using the system, even though those costs are largely independent of usage. Customers impose access costs on the system when they are connected to it, regardless of whether they then proceed to place or to receive calls.8 Because it ignores this fact, the present pricing practice has two adverse consequences, each the counterpart of the other. On the one hand, the basic monthly service charge is far too low. People are thus encouraged to become customers and, even more flagrantly undesirable, to order additional lines, when the value to them of that access is less than the cost to society of providing it. On the other hand, the charges for using the long-distance network are artificially inflated (on the order of sixty percent)9 because customers are required, by

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7. The argument for time of day charging is that usage during peak hours requires marginal additions to network capacity, whereas usage at other times does not.
8. See infra text accompanying notes 55-56.
the "separations and settlements" process currently followed by the FCC and local regulators,\textsuperscript{10} to contribute to the payment of costs that would not be avoided even if their long-distance calling were curtailed. The result is very inefficient—the artificial sixty percent tax discourages people from making long-distance calls by grossly exaggerating the costs they impose on society when they do so.\textsuperscript{11} This source of inefficiency is especially serious since the demand for interexchange calling is more sensitive to price than the demands for other services.\textsuperscript{12} The efficiency is almost certainly understated by the sixty percent figure as well, since that figure represents the markup above average costs, or average revenue requirements as set by traditional regulatory procedures. Marginal costs, to which economically efficient prices would have to be equated, appear to be far below average.

Some state regulators are being presented with testimony purporting to demonstrate that revenues from local service cover its fully distributed costs and that the asserted subsidy of local charges is therefore a fraud.\textsuperscript{13} In economic terms (and I cannot think what other terms are relevant) those demonstrations are nonsense. They rely on the economically false proposition, legally approved by \textit{Smith v. Illinois Bell},\textsuperscript{14} that interstate usage should bear some part of the non-traffic-sensitive costs of providing subscribers access to the local exchange.\textsuperscript{15} Only by allocating some portion of those costs to interstate usage do these studies "demonstrate" that the basic charge for local service fully covers the "cost" of providing this service. Once one accepts, instead, the economically incontestable proposi-

10. "Separations and settlements" is the process by which investments and expenses of telephone companies are allocated between the interstate and intrastate jurisdictions and, similarly, between intrastate toll calling and local exchange rates. Such allocations provide a mechanism by which revenue requirements for interstate and intrastate operations are developed. The present system of "separations and settlements" employed by the FCC is the so-called "Ozark" plan adopted in 1970, Separations Procedures, 26 F.C.C.2d 247 (Report and Order), which has periodically been reviewed and amended. See Separations Procedures, 80 F.C.C.2d 230 (1980).

11. Even if, as some are now contending, see supra note 5, these subscriber access costs did vary with usage, that would still fall far short of justifying the present system, which imposes these costs so disproportionately on the one-seventh of usage that is interexchange while most local calling is charged a zero marginal price. In the minority of cases in which measured local service is provided, local calling is often similarly burdened with charges per message markedly higher than marginal cost, in order to hold down the flat monthly charge.


14. \textit{Smith v. Illinois Bell Tel. Co.}, 282 U.S. 133 (1930) (suit by public utility to enjoin as confiscatory a state commerce commission order lowering rates for intrastate telephone service, holding that, in determining apportionment of costs between intrastate and interstate service, it is improper to ignore the fact that part of the use of a local telephone company's property is in the transmission and reception of interstate messages).

15. \textit{Id.} at 150-51. See supra note 5 for a reference to a later shift in this argument from the position that non-traffic-sensitive costs should be imposed on usage to a contention that a large part of what the telephone companies have been classifying as access costs are really traffic-sensitive.
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tions that costs that do not vary with usage should not be recovered in charges for usage and that there is no such separate service or phenomenon as access to the interexchange (as distinguished from the local) network, one recognizes inescapably—again, as a matter of economics—that imposition of any of those costs on usage constitutes an improper subsidy.

The third source of inefficiency is that typical local rates do not take into account the amount of local usage or, more importantly, the amount of usage at busy hours. Since additional local calling, at least at busy hours, requires extra capacity, the general practice of providing service on a flat rate basis—with no charge per call or per minute—results in excessive local calling. That is, it leads people to place calls the value of which to them is less than the costs those calls impose on society.

C. Inefficient Pricing as the Instrument of Cross-Subsidization

These inefficient pricing practices are the consequence and instrument of a complex network of cross-subsidies between different customer groups. First, long-distance service under the present system grossly subsidizes local service. A customer placing a long-distance call incurs a charge per call and per minute far greater than the additional cost to society of each call or minute, while a customer placing a local call in most areas pays nothing per call or minute, which of course is less than the additional cost to society. Moreover, the subsidy is very large—about $7 bil-

16. See supra text accompanying notes 4-7.

17. In practice, a customer must use both the local network and interexchange facilities to complete a long-distance call. There is no practicable way for a telephone company to provide access to the one and not the other. Any access is automatically access to the entire system.

18. This is not to deny that under certain “second-best” conditions, some such cross-subsidy may be economically desirable. See infra text accompanying notes 22-29. I am aware of no demonstration, however, that would justify anything remotely approximating the present level of subsidy.

Nor do I suggest that there may not be other ways, under the present charging system, in which local service charges recover some costs properly chargeable to interstate usage or to “vertical” services, or may do so in the future, depending on the terms on which assets were transferred between the Bell operating companies and the other portions of AT&T from which they have been separated. For example, the license contract fee, hitherto incorporated in intrastate revenue requirements, undoubtedly helped finance research and development of sophisticated terminal equipment that will henceforth be sold by the successor parent company. The AT&T settlement requires AT&T to account for benefits such as these, with a view to compensating the operating companies for them, in order to avoid or undo any such possibly unjustified burden on the basic monthly local charge. See United States v. AT&T Co., 552 F. Supp. at 177.

19. Some local telephone companies do use metered service in some markets. New York Telephone uses time-of-day charges while Southern New England Telephone offers an economy telephone service, “Select-a-Call,” under which the customer is charged a low monthly rate for simple access and low per call charges, discounted nights and weekends, for all outgoing calls. But these offerings are typically optional to residential customers, the overwhelming majority of whom take flat rate services, at a heavily subsidized flat monthly charge.
lion\textsuperscript{20} in 1981 from interstate toll calls (with a few billion more from intrastate toll calls), which amounts to an average of $7 per month for every telephone line in the country and, at the extreme, $27 per month in Nevada.\textsuperscript{21}

Second, because businesses do a disproportionately large amount of long-distance calling, business subscribers in the first instance subsidize residential subscribers. Since businesses generally survive by passing their costs on in their prices, however, this means in the final instance that residential telephone service is subsidized by a kind of sales tax on all the purchasers of goods and services produced by businesses that are overcharged for their telephone service.

Third, geographically accessible customers subsidize inaccessible customers. This is generally a subsidy from urban to rural customers and encourages an uneconomically high proportion of the public to connect to the network or to demand single-party rather than multi-party service.

Fourth, customers with a preference for making local calls during off-peak hours subsidize those with a preference for peak hours.

A pricing system based on marginal costs would correct these inefficiencies. Other considerations, however, seem to argue for a departure from marginal cost pricing. These are the subject of the next section.

II. Some Qualifications and Counter-Considerations, Rational and Demagogic

There are two valid qualifications to the proposition of the previous section that all marginal access costs should be recovered in the basic monthly charge. First, subscribers benefit from being able to reach other subscribers; if some drop off the system in response to cost-based access charges, this will reduce the value of the service to those who retain it. Second, various other social or political considerations might call for subsidization of access for certain groups, such as the poor.

A. \textit{External Benefits}

The first of these qualifications—the external benefits that one subscriber confers on others—could in principle justify making heavy users, who presumably get the most benefit from the system, subsidize the basic access charge so that they can continue to reach those who would other-

\textsuperscript{21} MTS and WATS Market Structure, Comments of the Bell Operating Companies and AT&T in Response to the Fourth Supplemental Notice of Inquiry and Proposed Rulemaking, 20-21, FCC Docket 78-72 (August 6, 1982).
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wise drop off the network.22

Since this consideration is a familiar one, I confine myself to two observations about it. First, the argument can easily be overdone. It is difficult to measure the size of the externality, and it is not at all clear to what extent heavy users are interested in reaching all who would decide not to have service if it were priced at its full cost. Second, providing a universally subsidized basic access charge is an excessively imprecise and inefficient way of preserving the external benefit. The particular heavy users who are especially interested in being able to reach and be reached by particular customers who would otherwise drop service—impecunious relatives, for example—could be expected to help pay those bills directly, without forcing the burden on others who would reap little or none of the benefit.

B. Preserving Service for the Poor

The second qualification is that there may be a broad social consensus that we ought to do something about people who would be excluded by purely cost-based prices from enjoying what we have come to regard as a necessary component of the minimum acceptable standard of living, and that we ought to do so without resorting to the economically superior method of direct government subsidy. This consideration is on the one hand so familiar and on the other so frequently abused that I consider it more important to refute the demagogic contentions with which it is all too frequently associated than to discuss the qualification itself—other than to observe that there are far less costly and inefficient ways of achieving this goal than simply rejecting economically efficient pricing.

The vulgar arguments to which I refer are such contentions as that the dictates of economic efficiency are in flat conflict with principles of equity, or that shifting more costs to the monthly charge is bad for "consumers" and must therefore be opposed by all who profess to speak for them.23

Clearly there are possible areas of public policy in which conceptions of fairness may conflict with economic efficiency. But the major departures from economic efficiency in today's public policies are also demonstrably unfair,24 and movement in the direction of economic efficiency is compat-

24. The following examples come to mind: farm parity price supports, the benefits of which go primarily to wealthy farmers; unlimited deduction of mortgage interest and property taxes, the benefits of which go primarily to the wealthy; and quota restrictions on imports of Japanese cars and steel,
ble with increased fairness. It is fair, as a general proposition, to impose costs on people when and to the extent they impose costs on society.

The "consumer," moreover, is not a single entity but a collection of diverse individuals, with varying patterns of behavior and needs. The proper pricing of communications services requires that we determine how best to distribute a given burden of costs so as to maximize the flow of benefits net of costs for all consumers. For example, there are consumers who make local calls infrequently, or, when they make them, make them off peak or briefly; and there are others who make local calls all the time, often on peak, and talk without limit. Therefore, to oppose local metered service—as some consumer advocates do—on the ground of equity or of "protecting the consumer" is simple demagoguery. There are consumers who want to make a lot of calls in an extended area at no extra charge, and there are others who happen to live in the country, or on the borders of local calling areas, whose equally short-distance calls are subject to inflated toll rates. It is ridiculous to imply that the interests of both of these would be similarly, and adversely, affected by a more efficient pricing system.

Similarly, there is a difference between the consumer who uses directory assistance all the time and the one who takes the trouble to look up numbers in the phone book. To oppose charging for directory assistance on the ground of "protecting the consumer," as many have, is to make an argument unworthy of respect. It is not unfair to consumers, who have to bear all the costs in any case, to distinguish among them on the basis of the costs they impose on society.

And it is a reflection at best of ignorance—and at worst of demagoguery—to advocate holding down direct charges to individual purchasers by shifting costs to businesses, in the supposed interest of "the consumer." The business of businesses consists largely in shifting their costs to their customers, and it is the simplest and least contestable of economic propositions that consumers in the aggregate are better off paying prices that reflect directly the marginal costs of the various goods and services among which they choose.

Returning to the second qualification, how can economic efficiency accommodate our desire to keep telephone service affordable to poor people? The task of social policy is to identify the people that we agree we would like to help, and then to find a method of helping them in a way that imposes the minimum cost on all of us—which includes them. Our tendency to try to help "consumers" by holding all prices down ends up injuring almost everybody. If we are to retain a subsidy for basic service, it which protect the salaries of highly paid auto and steel workers.
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has to be less negligently and haphazardly distributed and more tightly targeted at those who really need it. 25

Because of the way costs are actually incurred in providing access, it is also possible that a commitment to efficient, marginal cost pricing may itself produce a partial solution to the problem of providing access for the poor. The reason is that the bulk of non-traffic-sensitive costs, which the telephone companies are entitled to recover from their customers, is composed of carrying charges on the huge sunk investment in access facilities. That is to say, the average cost of access consists largely in historical, "embedded" costs of providing access to existing structures. Marginal costs, in contrast, look only to the future; they measure only the additional cost of connecting a given (new or old) structure to the network—the cost (and only the cost) that would be saved by someone deciding not to become or continue to be a subscriber.

This difference between average revenue requirements and marginal costs might hold the clue to a partial reconciliation of the demands of economic efficiency with the insulation of poor subscribers from sharp increases in their monthly bills. For those premises and service areas that already have inside wiring and access lines to the central exchange, whose costs are largely sunk and perhaps unrecoverable by salvage, the marginal cost of providing access could consist only in the cost of actual connection and current maintenance. 26 For new developments, in contrast, the marginal cost of providing genuinely new access is likely to be much higher. Customers in new developments can and should bear the higher costs they impose on the system; those in old developments (which presumably include most of the poor) might through de-averaging be spared those costs and therefore be less inclined to discontinue service.

To understand why this distinction between customers in old and new developments is in principle sound (however large or small the differences in their marginal costs actually prove to be), we may contrast it with the argument of many electric utility companies and some “consumer advocates” that new customers should pay higher electric rates than existing customers because they are responsible for the high “marginal costs” of

25. We might, for example, issue “telephone stamps,” analogous to food stamps, to those determined to be in genuine financial need. See also H.R. 5158, 97th Cong., 2d Sess. § 234 (1982) (proposal for National Telecommunications Fund).

26. The reason this cannot, without further study, be characterized as more than a possibility is that the marginal cost of any subscriber’s remaining attached to the network includes the opportunity cost of providing him access—the possibility that the facilities now serving him would otherwise be released to serve someone else and the telephone company spared the new investment in additional facilities to attach the new customer. One can therefore be certain that the marginal hook-up costs for existing customers in existing structures are below current costs only where, if those customers dropped service, the facilities would be unused and the sunk investment in them stranded.
additional capacity. In the case of electric generating costs, that argument is nonsense. The demands of new and old customers for generated electric power are economically indistinguishable so far as their marginal cost responsibility is concerned; the need to build costly new generating plants would be reduced just as much if existing customers conserved as if new customers did not join the system. Economic efficiency therefore requires that every kilowatt hour demanded be confronted with the same marginal cost. Electric distribution costs, in contrast, are geographically specific to particular categories of customers. So with telephone access costs: Levying the same access charges on new and old customers—when and if the marginal costs of attaching them differ substantially—subsidizes new, higher cost subscribers at the expense of existing ones.

The logic of this distinction, as a matter of both economics and equity, is the same as underlay the recent decision by the FCC that the costs of connections, installations, and moves should be expensed and charged directly to the customers responsible rather than capitalized and thereby charged to everybody. There is no reason why people who do not move should subsidize people who do. Likewise, there is no reason why people being served in existing service areas, by existing drop lines, should subsidize people whose access requires the system to incur high costs—except to the extent that discontinuing service by the former would free up facilities that could be used to serve the latter.

There may, therefore, be some justification, even in terms of economic efficiency, for providing a low-priced, lifeline service to existing customers—involving low access charges and separate charges for each call—as a means of minimizing the burden on poor people and the surrender of service, while also minimizing the inefficient discouragement of usage.

III. Recent Movement Toward Efficiency, and Political Countermovements

By separating local exchange from interexchange operations, the AT&T settlement gives local Bell Operating Companies (BOC’s) responsibility for imposing charges covering the non-traffic-sensitive costs of access, as well as the traffic-sensitive costs that interexchange service causes them to incur. This makes sense, because it is they who provide

28. Another "lifeline" service—practicable in some areas that still offer multi-party service—might be a four- or eight-party line.
30. Id. at 232.
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the facilities and incur those costs. By placing on the BOC’s the burden of imposing access charges based on their individual costs, the settlement clearly encourages de-averaging across operating companies and across state lines—which is also the direction economic efficiency dictates. There will undoubtedly have to be a substantial amount of residual averaging in order to avoid intolerably abrupt rate increases in high-cost areas that are heavily subsidized under the present system, but the only way to eliminate the disincentives to efficiency inherent in the present system of “separations and settlements” is to move toward de-averaging as quickly as possible. The ultimate goal ought to be a situation in which each carrier sets its own exchange access charges, on the basis of its own costs, to its own customers.

The settlement also strengthens the case for the “Pure II” approach considered and essentially adopted by the FCC in Docket 78-72, which over a five to seven year period would have levied directly on subscribers, in a lump sum monthly charge, the entire portion of non-traffic-sensitive access costs currently allocated to the interstate jurisdiction via “separations.” Since the BOC’s will be responsible for recovering all of their exchange access costs from their customers, who alone cause those costs to be incurred, the BOC’s are less likely to suffer from the illusion that they can extract the dollars from some external “interstate” entity, and correspondingly more likely to collect them from people as they impose costs on the system.

Of course, the BOC’s will probably want to continue to levy some part of the non-traffic-sensitive costs on AT&T and the other interexchange (long-distance) common carriers, necessarily on the basis of usage, in order to hold down the requisite increases in the basic monthly charge. They certainly will be pressed to do so by the regulatory commissions—to the point, there is reason to fear, of imperiling the financial viability of the BOC’s. But because they and the state commissions are the ones that will now be responsible for recovering these costs, they will no longer be able to ignore the consequences of attempting to recover too much of them out of long-distance charges. They will see when and where charges that are too high induce a bypass of their facilities and consequent loss of revenues, causing injury to themselves and to the consumers whom it is their responsibility to protect.

31. See supra text accompanying note 20.
32. See supra note 10.
34. Id. at 10,330.
35. See supra note 1. See also United States v. AT&T Co., 552 F. Supp. at 175.
Under the new arrangement created by the settlement, the local companies and regulators also will be in a position to vary the recovery of non-traffic-sensitive costs between flat access charges and rates related to long-distance usage, depending upon local market conditions. They will have to decide, from market to market, how long these costs can be recovered out of long-distance charges, and therefore how quickly they must begin recovering them entirely from the flat monthly charge.

Moreover, as the decision affirming the settlement suggested, there may be an encouraging inverse relationship between competitive necessity and the size and painfulness of the required change: In rural areas, where access costs tend to be high, bypass possibilities are slight and the transition can therefore be longer, with a relatively low, subsidized access charge and a relatively high recovery of non-traffic-sensitive costs from long-distance usage. In cities, by contrast, where the cost of providing access generally is lower but the bypass possibilities much greater (because of concentrated traffic), the transition must be more rapid, but it probably will be less painful. Where heavy long-distance users can more readily escape the burden of non-traffic-sensitive costs, it is more urgent to recover such costs out of the flat charge, but it will be politically easier to do so because there is less difference between the current monthly charge and the “true” costs of access.

Whatever the possibilities of mitigating the pains of the move toward more efficient pricing compelled by the introduction of competition, there is no doubt the pains will be intense, and the political resistance even more so. No regulator will be happy having to raise the monthly charge. Indeed, the success of state regulators over the last twenty-five years in imposing an ever larger proportion of the non-traffic-sensitive costs of access upon long-distance usage has widened the inefficiency gap and, correspondingly, aggravated the political problems of closing it. Ironically, this occurred during the very period when the national policy of opening long-distance telephone service to competition was bringing closer the day when such gross subsidizations could no longer be sustained.

Recent events graphically illustrate these political obstacles. Since the

36. 552 F. Supp. at 169.
37. Id. at 175.
38. I have surely oversimplified. On the one hand, the costs of providing and maintaining exchange access may be very high in some very dense center cities, where the dangers of bypass by large users are also great. On the other, I owe to Walter Hinchman the suggestion that moving to the Pure II approach in rural areas may be easier than commonly supposed, because rural customers, precisely because of their comparative isolation, are disproportionately burdened with inflated toll charges, which would come down as the basic monthly charge went up.
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FCC announced its sensible position in Docket 78-72, in December of 1982, the regulatory and legislative resistances have mounted. The judge superintending the AT&T settlement has expressed his outrage at the FCC's failure to perpetuate the old system of imposing non-traffic-sensitive costs on the long-distance caller, thereby threatening (quite unjustly) to write his name in the history books as the man responsible for doubling the basic telephone charge. A Congressional effort to turn back the clock has gathered momentum. The FCC itself has felt compelled to modify and delay its original plans, and the final outcome is difficult to predict. The one thing that is certain is that the new regime of competition, on the one hand, and perpetuation of the old regime of inefficient pricing, on the other, are fundamentally incompatible; one or the other is going to have to give. In the following section, I consider two possible ways of easing the transition, corresponding to the two horns of the dilemma confronting the telephone companies and their regulators.

IV. The Transition to More Efficient Pricing

A. The Case for Gradualness

The more visible horn of the dilemma is the painfulness of the inescapable increase in the basic monthly charge. The most obvious palliative is to spread the increase out over time. Another measure, even more important in the longer run, is to offer subscribers a wider range of price and service options than is currently available. Elaboration of the latter idea is reserved for Section V.

Allowing for a gradual, but not too gradual, transition to efficient pricing can serve a valuable economic as well as political purpose in two ways, provided the end result is clearly announced. First, it may serve as a justification for avoiding uneconomic upgrading of service. I recently heard a regulatory commissioner from a sparsely populated western state complain of the public pressures his local phone company was under from rural customers to go from four-party to one-party service, knowing full well that he could not hope to permit the company to charge the estimated cost of $30 a month. An announcement that the costs of that superior access must eventually be added to the basic charge might help relieve

those pressures.

Second, a gradual transition would give alternative technologies better adapted to serving high-cost customers an opportunity to be introduced or developed, whether by the phone companies themselves or others. The rationalization of rates offers hope for technical solutions to the problem of providing quality service to high-cost areas, the development of which is discouraged by the present cross-subsidized rates. Could it be, for example, that announcement of scheduled increases of local rates in rural areas would make radio telephony over those long, sparse routes economic?

B. The Case for Quantity Discounts

The other horn of the dilemma, of course, is that any transitional arrangement that leaves a portion of the non-traffic-sensitive costs to be recovered out of long-distance charges will encourage bypass of local networks, a danger already magnified by the recent intensification of competition and the progress of technology. Such bypass would be uneconomic because it would result from the excess of current rates over marginal cost. The telephone companies will have to propose, and regulators consider, a variety of ways of minimizing this danger. Since the possibility of bypass grows with the individual subscriber's use of the network, an important component of the interim rate structures will probably have to be some sort of "taper," a declining rate for incremental usage that will provide a progressive quantity discount. Such a rate structure could be patterned on the familiar declining block rates for electricity, which had the same historical justification.

The economic case for the taper, in these circumstances, is unexceptionable. Marginal costs are now below average revenue requirements, and rates set at the latter level are resulting in an economically unjustified loss of customers. The rates for successive blocks of usage must not, of course, decline below marginal cost. True, such a discount will help the big users disproportionately; but if big users have an escape from economically excessive charges, a BOC will have no choice but to reduce rates to them if they are to make any contribution to the access costs which the small users would otherwise have to pay by themselves. The taper is clearly needed in these circumstances, then, in the interest of both economic efficiency and minimizing the danger that small users or impecunious subscribers will

43. Such alternative technologies might include, among others, high-speed, wide-band multipoint distribution facilities, direct broadcast satellite services or mobile radio.
44. See supra note 1.
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drop off the system.

Quantity discounts are not the only rate innovation needed for the transition. The BOC's may need permission to respond to threatened losses of large customers on an individual basis as well, for example, by negotiating long-term contractual rates, just as the railroads were at last permitted to do by the Staggers Act of 1980.46 This might be the only way of giving them sufficient flexibility to meet the threat of new competition engendered by the inefficient rate structures to which they will be held during the transition.

How long the transition ought to be or, given political considerations, will have to be, I do not know. How long the residual subsidy will remain and how large it will be, say, five years from now, I do not know. Whether it can ever be totally terminated, I do not know. I am certain, however, that the subsidy can be drastically and safely reduced without impairing our present near universality of service, merely by directing it more precisely to the people who need it most, and that it can be financed more efficiently than it is financed today. The new regime of competition compels it; economic efficiency, which our country badly needs, requires it; equity demands it.

V. Overcoming Political Obstacles

Progress toward more efficient pricing policies has already met with formidable political resistance.47 However much they may be required for economic efficiency, justified by the non-traffic-sensitivity of access costs and compelled by the pressures of competition, increases in the basic monthly rate are political poison. They will be even more difficult to bear because they will be magnified in the short run by other consequences of intensified competition and technological change, notably the required increase in depreciation rates.48 A further impediment to any rational solution is the widespread popular belief that if something is regulated it can defy the principles of economics. The same people who are willing to pay $15-$25 per month for cable TV, Home Box Office, and the like seem to regard a $6-$10 rate for unlimited local calling as a God-given right. And people buying a newly built $70,000 house regard it as heinous if they are required to pay the $150 or more that it costs to put a telephone in it.

There are no miraculous solutions to these political obstacles, yet there are ways of circumventing or confronting them. And, because technology

47. See supra note 42.
and economics are powerful allies, there is reason to anticipate at least partial success. The following are seven suggestions for overcoming these obstacles.

One politically helpful course was the one the FCC attempted to adopt when it assumed responsibility for part of the rate increase in the form of a separate charge for “interexchange access.” That decision, had Congress permitted it to take effect, would have made the job of state regulators easier by taking this unpleasant task out of their hands. One advantage of the federal system is that it may make it possible to do some necessary but distasteful things at the national level that would be politically impossible to do locally. Unfortunately, the resistance in Congress proved so strong that the FCC delayed this action as to residential and small business subscribers, at least until after the 1984 election.

Second, we must patiently explain to the courts and the public at large the fallaciousness of the widely held opinion that if you use some facility and get some benefit from it, it is only fair that you pay some share of its cost, even though your using it imposes no sacrifice on anyone. Anyone who has argued in a public forum the merits of peak responsibility pricing will recognize how profoundly held that view is. I fear it is the underlying rationale of *Smith v. Illinois Bell*.

For its attempt to reconcile popular opinion and *Smith v. Illinois Bell* on the one side, with economic reality on the other, by imposing a lump sum charge for “interstate access,” the FCC surely deserves an A for effort and ingenuity. Unfortunately its proposed solution invites the response: “I don’t want interstate access. I don’t make any long-distance calls, so why should I have to pay for it?” And to the counter-argument that there is no way of choosing to have or not to have interstate access apart from local access, the rejoinder: “If there is no such thing as interstate access, how come you’re proposing to charge for it?” In short, I fear that this attempt to satisfy *Smith v. Illinois Bell* while nevertheless removing the tax on usage may be unsuccessful.

I suspect, therefore, that it will eventually be necessary to expose as false the notion that “interstate” is some identifiable entity onto which “local” consumers can shift some of the costs of the system. What we must clearly explain is that only real people, “local” people, pay the costs of

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49. MTS and WATS Market Structure, *supra* note 42.
50. *Phone Access Fee Delayed Until ’85, supra* note 42.
51. *See supra* text accompanying notes 4-8.
52. I recently had a pleasant conversation with the owner of a trucking company that has prospered under deregulation. He expressed enthusiasm for that reform, but expressed chagrin that he was finding himself compelled to charge higher rates on his front-hauls than on his (thinner) back-hauls; it struck him as unfair. I attempted to reassure him.
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telephone service, and that how these costs are distributed among them should depend upon their respective responsibilities for the system's incurring these costs.

Access costs are incurred when the subscriber subscribes, not to interstate service, not to intrastate service, not to local service, but to the availability of any and all of these. Therefore, to interpret Smith v. Illinois Bell as holding that because the subscriber uses the facility for both interstate and intrastate calling, much or little, the cost must be levied on that use rather than on the act of connection that causes the costs to be incurred, would be to elevate legal fiction above economic reality. Or perhaps the following version of the same reality might be easier for the courts to accept, because it avoids direct confrontation with Smith v. Illinois Bell’s assumption that fairness requires users to share the common costs of the facilities that make that use possible: Subscribers use telephone facilities in a number of ways; they use certain facilities when they ask merely to be hooked up; they use others when they pick up the phone and dial a local call; they use others when they make interexchange calls; they use others when they receive calls. I have difficulty believing that Illinois Bell would have to be interpreted, in 1984, as inconsistent with a system of charges that differentiates these various usages and charges each with the costs that it imposes on society—and only with those costs.

The answer, in short, is to teach the courts elementary marginalism, but—a mild tactical suggestion—without using that word.

Third, in driving home this lesson, in and out of the courts, it is important to point out that we are talking not about additional revenue requirements but only about rate structure reform—not charging consumers more but redistributing the burden among them.

Indeed, fourth, we should never pass up an opportunity to point out that a closer conformance of rate structures with costs will reduce bills—except as people choose voluntarily to take more service when rates are reduced. Cost-based pricing is a powerful way of reducing the costs generated by the present system of subsidization. The more services for which one charges less than marginal cost, the more uneconomic use one encourages and the heavier the consequent burden on all subscribers.

Fifth, we must emphasize and reemphasize the inequity of mindless, unfocused subsidizations. These last two points are well illustrated by recent experience with charges for directory assistance. Upon introducing

54. The costs of connection are the same regardless of the subscriber's subsequent use of any or all of these services.
55. 282 U.S. at 150-51.
56. See supra text accompanying notes 8-19.
such charges, the New York Public Service Commission was attacked by every demagogue in the state on the ground that it was letting the phone company charge people for something that was previously free.\textsuperscript{57} (I have no doubt this experience was repeated elsewhere.) The Commission wisely introduced the new charging system when no rate increase was pending, so that the new system incorporated a charge and a rebate. When the Commission was able to point out, after two months experience, that directory assistance calling went down forty-five percent and that eighty-five percent of the subscribers in the state received the full rebate—from which it appeared the eighty-five percent had previously been subsidizing the other fifteen—the opposition disappeared.\textsuperscript{58}

In the same way, we must remember that the smaller number of other phones a rural subscriber can reach is itself no reason for lower rural than urban rates, when the difference is unjustified on grounds of relative costs, and that the greater purported virtues of rural life are no reason for inhabitants of center cities further to subsidize it in their telephone bills. Similarly, the enormous disparity between intrastate toll rates and the charges for mileage bands within an extended service area should be openly challenged, on grounds of fairness as well as economic efficiency.

Sixth, telephone companies and their regulators must resist pressures to upgrade service without charging the affected customers the full costs. It should surely be possible to show rural subscribers the cost of going from four- to one-party service, or to show metropolitan area subscribers the cost of giving them extended area service, and enlist public support for not doing so unless they are willing to pay those costs. An informed public, one would hope, is unlikely to regard a mere improvement in the quality of service as a necessity, much less a necessity which people are entitled to receive at non-compensatory rates.

Seventh, unbundle, unbundle, unbundle. Unbundling promises a large number of benefits which, if sufficiently publicized, should make it politically popular. In the present context, its most important benefit is that it helps pinpoint subsidized service as well as the recipients of the subsidies. Telephone companies should offer access alone, or low-priced four- or eight-party service, then make sure its availability is widely publicized. In that way companies and commissions can honestly claim to be meeting any reasonable conception of their social responsibility, namely, to ensure that there is an inexpensive service available for people who are really poor.


\textsuperscript{58} See \textit{N.Y. Times}, Dec. 30, 1975, at 29, col. 7.
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Unbundling probably should be undertaken even if the direct immediate benefits are less than the costs. For example, unbundling requires measured local service, which, to be truly efficient, must also incorporate time-of-use differentials. There is a serious question whether the direct cost savings generated by such measurement will in all situations outweigh the costs of measurement. Observers like Bridger Mitchell have found that, where electronic switching is readily available, costs and benefits are likely to be comparable. But even where measurement costs exceed the direct benefits, we probably should start measuring. For if measurement is necessary to move us away from the gross inefficiencies of the present system, its initial costs are a small price to pay. Besides, measured service is also fair. Heavier users, who impose heavier costs on the system, should pay more than light users.

Conclusion

The inefficiencies of present telephone pricing policies—cost averaging, usage-based access cost recovery, and flat charges for unlimited local calling—maintain an unrealistic, inequitable and inefficient regime in which certain groups of consumers subsidize others in ways unrelated to rational social goals. To correct these inefficiencies we must move to cost-based, unbundled pricing. The arguments against that kind of pricing, particularly concerns about telephone service for the poor and the desire to maintain universal service, fail to acknowledge that, in the long run, marginal cost pricing is both equitable, since it charges people the costs they impose on society, and efficient, since it decreases total costs and makes it easier to direct subsidies to those who need them most. While both fairness and political prudence clearly justify a gradual transition to more efficient pricing, failure to begin moving promptly and substantially in that direction will be self-defeating because it will encourage large users to bypass the local exchange, thus imposing a larger share of fixed costs on the smaller number of users who remain tied to it.

The shift to more efficient pricing of telephone services is compelled by our new national policy of deregulation and competition and constitutes one of its major benefits. True, competition poses both practical and political problems. Its beauty, however, is that it forces us to comply with the dictates of economic reality; its consolation is that to the extent we do, there will be improved welfare for most of us and efficient ways of taking care of those who fall behind and genuinely deserve help.
