

Comments on

**"LOCAL TELEPHONE PRICING IN A
COMPETITIVE ENVIRONMENT"**

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State regulatory commissions face, at present, an enormous challenge as a result of several major changes that are occurring in the telecommunications sector: the divestiture by AT&T of its operating companies; the ongoing efforts by the Federal Communications Commission to increase competitive opportunities; and the rapid technological developments that are making entry opportunities more significant. It now seems fairly clear that the telecommunications markets are being transformed from markets subject to pervasive economic regulation at all levels to markets that will eventually be governed by the discipline of competitive forces at all levels, except that of the local telephone network. The performance of the telecommunications markets of the future depends in many ways on how rates for local services and local network access fees are determined. In their article, Willig and Ordover present a useful concep-

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tual framework for evaluating alternative telephone rate structures, and make a number of interesting suggestions for revising current rate structures so as to promote economic efficiency.

I will address most of my remarks to what I interpret to be the normative analysis presented in their article. The article contains numerous conclusions regarding what "must" or what "will" happen to rates. These conclusions may be correct; absent any clear model of regulatory objectives or regulatory behavior, however, it is extremely difficult to evaluate them. I will therefore focus on what I take to be the authors'—again, normative—suggestions to regulators for establishing telephone rates that allow the local telephone companies to recoup their costs while minimizing the distortions induced by alternative compensatory rate structures.

The Ordoover-Willig article focuses on the observations that the legal and institutional opportunities to bypass the local network to gain access to interexchange services are increasing, and that the costs of bypass are declining rapidly. Assuming that these statements are correct (the first certainly is, and since I am not familiar with the costs of bypass, I will assume that the second is as well), at least two things would happen if current rate structures were to be maintained (with local network access fees directly substituted for the prevailing distribution of net revenues obtained from interexchange services, in order to support a portion of the local network costs). First, some large users of interexchange services would find it economically advantageous to install equipment to bypass the local loop and go directly to interexchange carriers. Some of this substitution could very well enhance efficiency if the costs of bypass were less than the costs that would otherwise be imposed on the local network by such customers. However, since access fees consistent with current interexchange contributions to local network costs appear to be far greater than the local network costs incurred by large users of interexchange services, bypass may be chosen even though it is a costly alternative to using the local network. Thus, some bypass would be socially inefficient. Second, as large users left the system, the net contribution that they now make to the costs of the local network would be lost. Absent some rate response either to increase the revenues obtained from the remaining customers or to reduce defections by large customers, the operator of the local network would lose money. Over time, this would inevitably lead to a deterioration in the quality of local telephone service.

The authors offer us a number of ideas for establishing rates that would allow for efficient bypass, deter inefficient bypass, and permit the operator of the local network to cover its costs. First, rather than trying to replicate the current distribution of net contributions to local network costs in local network access fees, a Customer Access Line Charge (CALC) could be established that would be set equal to the marginal access cost incurred by the customer. This would imply lower charges for the largest users of interexchange services and higher charges for the bulk of the residential and business customers (assuming that the cost figures upon which the authors rely are correct). Second, efficiency could be improved and net contributions to local network costs increased by adopting Local Measured Service (LMS) charges. To the extent that the marginal cost of a call is greater than zero and the additional metering and billing costs are less than the direct efficiency gains associated with marginal cost pricing, moving from a system that does not charge for the number, time, and duration of local calls to one that does will increase efficiency and reduce the revenue burden placed on CALCs and NTS local line charges. Furthermore, if for one reason or another the revenues generated from CALCs priced at marginal cost plus local charges based on marginal costs do not cover total local network costs, setting LMS charges above marginal costs may be more efficient than setting CALCs above marginal costs. Maintaining LMS charges that are too low could necessitate raising CALCs above marginal cost to cover total costs. This would be inefficient if the demand for local calling is less elastic than the demand for network access.

The general approach of moving toward a pricing system where all charges are based on marginal cost, and where deviations from marginal cost to meet total revenue constraints are made with appropriate consideration of the relevant demand elasticities, certainly makes very good sense. However, this approach will necessarily raise numerous questions about what the relevant marginal costs actually are. A detailed analysis of alternative methods for estimating marginal costs is obviously beyond the scope of this discussion. Yet I believe that this issue will become extremely important and controversial in the telephone rate-making area, in much the same way as it has become a controversial issue in the area of electric power rate making. Differences of opinion over how one estimates the relevant marginal costs, what they are, and the short-run impacts on

different groups of customers, will make implementation of these ideas difficult for state regulatory commissions. It seems to me that the development of empirical methodologies for estimating the relevant marginal costs should become a subject of greater research concern. This can be an especially difficult task when a significant fraction of the costs are joint and when costs vary in complex ways with the time, duration, distance, and number of calls. The figures that the authors rely upon in the article are adequate for purposes of illustration, but they may not be satisfactory for regulators confronting diverse interest groups, all of which want their rates to be lower, while they must on average increase to be compensatory in the aggregate.

Let me note in passing that the figures that the authors present for evaluating LMS do not imply that the universal adoption of LMS charges would be desirable. It appears that for customers whose usage is very light, the transaction costs associated with metering and billing could easily outweigh any reductions in dead-weight loss associated with LMS charges. The availability of restricted flat rate service may be appropriate. Given the fairly wide range in the estimates of metering and billing costs, efforts to refine them are likely to be productive.

The authors go on to recognize that the implementation of a pricing system based on pure marginal cost may not be feasible as a practical matter, and may even be undesirable if a more expansive conception of efficiency is used. CALCs set equal to marginal cost could lead to large increases in the rates charged to certain classes of customers, such as rural customers and light users of interexchange services. Regulators may not find it politically feasible to make dramatic changes in rates for some groups. Furthermore, higher CALCs could lead to a reduction in the penetration rate of local residential telephone service, and to the extent that there is a significant value (whether a noneconomic value or network externalities) associated with "universal service," this might be undesirable. I would add that there is no guarantee that prices based on marginal costs would, in any event, yield revenues equal to total costs. The authors propose alternative nonlinear tariffs that allow for departures from marginal cost pricing to achieve various objectives, while minimizing the distortions associated with inefficient bypass decisions.

The authors recognize that these alternatives are imperfect, and that they are likely to lead some distortions even if they are reasonably well implemented. There are trade-offs that must be made; and given the difficulties of defining the value of "universal service" and the need to base these rate alternatives on the costs of bypass technologies that are both uncertain and likely to change over time, I have some concern about the use to which regulators will put these ideas. If used incorrectly, these second-best schemes could become rationalizations for almost anything. The authors have laid the methodology out clearly, and we can only hope that it will be used intelligently.

It is clear that the regulators have it in their power to establish telephone rate structures that respond to the changes in this industry (both institutional and economic), and to make the best use of both the technological and economic opportunities that are upon us, and those that are visible on the horizon. The authors have given regulators a framework for thinking about the way to proceed, but will they listen? It is a bit hard to be optimistic. Implicit in much of the authors' discussion is the assumption that regulators will have to adjust rates so that costs and revenues are in balance, and that they will be concerned about inefficient bypass. It is not obvious to me that this is a good assumption on which to base a prediction of short-run regulatory responses. The rate structure changes that have been suggested will dramatically benefit some classes of customers, but will substantially increase the costs of others. Changes of this magnitude will be controversial, and the associated regulatory proceedings will be contentious.

Telephone customers, especially residential customers, have become accustomed to declining prices and seem to like flat rates. Consumer groups representing residential and small business customers are likely to intervene in regulatory proceedings in opposition to rate structure changes. Faced with the short-run choice between higher rates and adequate earnings for the operating companies and a smaller rate increase and inadequate earnings for the operating companies, regulators are likely to choose the latter. In making this choice they will probably discount the long-run consequences of inadequate earnings (deteriorating service quality and possibly higher rates in the long run) and justify their decision by underestimating the bypass problem. Subsequent regulators would

be left to deal with the effects. Regulatory decisions are likely to reflect short-run political considerations and undervalue long-run efficiency issues. This is essentially what has happened to the electric power industry during the 1970s. Some might have thought that the state commissions "must" pass on higher electricity production costs by increasing rates accordingly, but they didn't. It will be a challenge to keep the same thing from happening to the local telephone system.