

Comments on

"LOCAL TELEPHONE PRICING IN A COMPETITIVE ENVIRONMENT"

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This article identifies the economic parameters of the prices for telephone service furnished by local Bell Operating Companies, and examines their effects on the prices for such service within a post-divestiture environment. The term "post-divestiture environment" refers to the era following the implementation of the Modified Final Judgment (MFJ) resulting from the settlement of the federal government's antitrust case, No. 74-1698; *United States v. American Telephone and Telegraph Company (AT&T), et al.*

On January 8, 1982, AT&T and the Department of Justice (DOJ) announced that the government's antitrust suit, filed in 1974, had been dismissed. The parties filed in the District Court for the District of Columbia a Stipulation for Voluntary Dismissal of that case. The parties also announced that an agreement had been reached that would revise and replace an earlier 1956 Consent Decree agreement in the proceeding, *United States v. Western Electric Company, et al.*, case No. 17-49. The new MFJ vacates the 1956 final judgment in its entirety and substitutes the new judgment.

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The MFJ provides, among other things, that AT&T will divest itself of the local Bell Operating Companies (BOCs), while continuing to retain the ownership of the Western Electric manufacturing entity, the Bell Telephone Laboratories, and the Long Lines Department. After divestiture, the BOCs will be responsible for the provision of exchange telecommunications within newly defined exchange areas referred to as Local Area Transport Areas (LATAs), which are constructed around Standard Metropolitan Statistical Areas (SMSAs). The BOCs also will be required to supply exchange access for interconnection of subscriber communications to all carriers on an equal basis for telecommunications services between LATA regions. The AT&T Company, through its Long Lines Department and other subsidiaries, will be one of many future carriers to compete for the inter-LATA telecommunications markets both within state jurisdictions and between states on an interstate basis as presently tariffed.

Underlying the divestiture is the enhancement of competition of telecommunications services in interexchange markets by multiple intercity carriers through equal access and equal charges for such access. The settlement specifies that each divested BOC provide to all interexchange carriers (and information service providers) information, access, and services for such access that are equal in type, quality, and price to that provided to AT&T's Long Lines Department.

Fundamental to the Ordovery-Willig article is the fact that in a pre-divestiture era, significant cross-subsidies exist between the present pricing of basic exchange telephone services for residence and business subscribers and the pricing of interstate long distance services furnished by the Long Lines Department. The subsidy—which is historically based on a social policy to promote maximum telephone development in both urban and rural regions of the country—is achieved largely through the Separations Procedure and the Division of Revenue Process. The procedures provide that a portion of the BOC's exchange access cost and other terminal equipment costs for telephone sets and PBX (Private Branch Exchange) facilities be assigned to the interstate jurisdiction and that they be covered by revenues from the Division of Revenues that are generated by the rates for interstate long distance calls.

The present subsidy from interstate rates is substantial. For the New York Telephone Company, for example, it amounts to about

\$600 million annually. Other intrastate pricing subsidies yield additional support to the local access rates totalling \$600 million. Thus, the aggregate subsidy totals \$1.2 billion. The breakdown of the exchange services that are subsidized is shown in Table 1. The specific identity of the subsidy in unit rates versus the costs of service is shown in Table 2. Here, it is observed that the principal local exchange access rates for residence and business classifications and for flat rate and message rate services are about half of the monthly operating costs of service. In a post-divestiture era, where competition will prevail freely for interexchange markets both on an intrastate and interstate basis between LATA regions, the rate subsidies derived from long distance rates can not be sustained.

The first tenet of the Ordovery-Willig article is that neither the act of divestiture nor increased competition in interexchange markets will be the fundamental cause of increased local exchange access rates. Further, should access rates have to be increased, such changes cannot be viewed as a social cost of divestiture that counterbalances the gains from enhanced competition for long distance services. The mechanism suggested by Ordovery and Willig to overcome the problem of shifting subsidy in the network prices in a purely competitive environment is the adoption of a system of network access charges that would be assessed on all interexchange carriers. In addition to recovering the actual resource costs of the

Table 1. New York Telephone Company Exchange Services Below Fully Allocated Embedded Costs (For the year 1982).

	<u>Amount Below Cost</u> (Millions)
Exchange access lines	\$1,030
Connection charges	55
Local coin calls	85
Directory assistance service	65

Table 2. New York Telephone Company Local Exchange Access Line Service (Comparison of rates with fully allocated embedded costs).

	Monthly Charge	Cost
Business message rate	\$ 8.48	\$17.00
Residence flat rate (weighted average)	11.40	22.68
Residence message rate (with \$4 allowance)	6.36	20.09
Residence "Life Line" (no allowance)	2.56	17.00

interconnection including related traffic sensitive costs, the network access charges would also recover dollar-for-dollar the amount of subsidy generated presently by the separations procedure. In this manner, monthly local exchange rates for residence and business customers need not be increased for divestiture purposes.

The access charge mechanism that Willig and Ordoover suggest as a replacement for the present subsidy is indeed a sound approach to the maintenance of reasonable levels of local telephone rates for the near term. Local exchange rates have been subsidized for the better part of the history of the telephone industry. In New York State, in the New York Telephone Company operating territories, telephone development has been achieved in most households and in virtually every business establishment. Much of that development can be attributed to the subsidization of local service. Complete elimination of the existing subsidy for 6.5 million subscribers in New York, and for subscribers throughout the United States, would be neither appropriate nor politically possible in the short term. Half of the subscribers do not make toll calls whose rates would be partially reduced by eliminating the subsidy, equalizing, in part, the effects of rising local rates. Therefore, absent some other form of subsidy,

half of the subscribers would experience absolute increases in their monthly bills. A portion of the remaining half of the ratepayers would experience some increase in their monthly telephone bill, depending on the number of long distance calls placed.

The extent of the possible increases in billing can be ascertained by referring to the data contained in Table II, which identifies the present monthly charges and the operating costs of basic exchange access line service. The potential increases could range from \$11.28 to \$14.44 per month for residential customers (fully allocated embedded cost less present monthly rate). For the 361,000 customers in New York who subscribe to the Life Line Service, the present \$2.56 monthly charge could experience a substantial increase toward the \$17.00 cost level, putting a sizable impact on the family budget for lower income subscribers.

The implementation of equal network access charges for all carriers which, dollar for dollar, would replace the present subsidy in the Long Lines' interstate toll rates, permitting them to be designed at levels that are competitive with other carrier rates, would eliminate the requirement to increase subscriber rates. Thus, in the short to medium term, the provision of affordable basic telephone rates may be maintained for all subscribers.

The second tenet of the Ordovery-Willig article is that local telephone rates will have to increase as a result of the decreasing costs of telecommunications networks resulting from bypass technologies. As the authors state, such a conclusion appears paradoxical. However, it is the correct observation, and a consideration that both the management of the BOCs and the regulatory commission must recognize and plan for effectively with respect to impacts on subscriber rates.

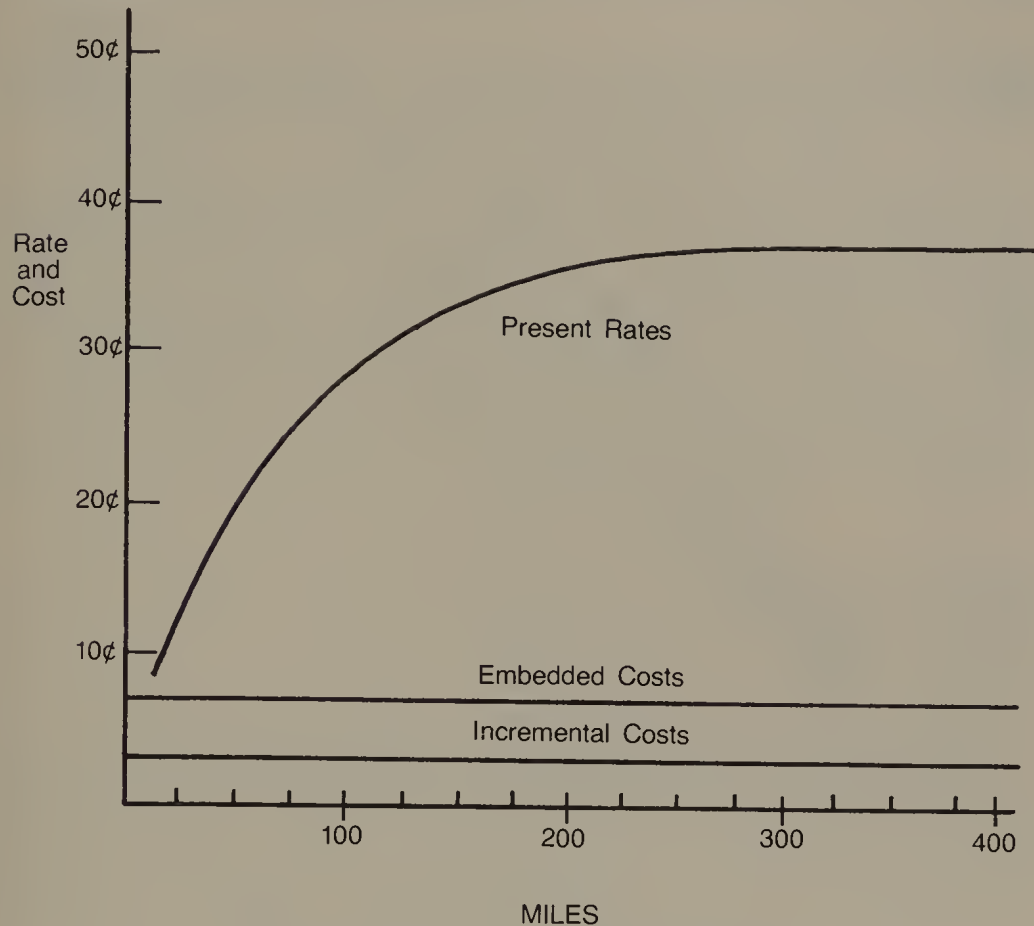
Daily readings of major metropolitan newspapers and communications trade journals bring news of rapidly changing technology and the advent of two-way, interactive communications systems that have the capability of serving mass markets. The authors cite bypass systems that include microwave, direct cable, and cellular mobile radio. These systems would have particularly beneficial leverage for the larger industrial customers who generate sizable volumes of interexchange traffic and who pay considerable sums for long distance calls. To the extent that they choose to employ a bypass system, the revenue and the contribution element of the long distance subsidy

would be lost. That foregone revenue, however, must be made up elsewhere in the firm's price structure. In a post-divestiture era, where the only significant service offered by BOCs is local exchange access, the price of that service must rise to offset the lost contribution.

It should be pointed out here that bypass is not a direct result of divestiture as such. Bypass systems have existed in the pre-divestiture mode of monopoly operation and, in fact, have been promoted by the BOC vis-à-vis Private Line systems, Foreign Exchange Service, and mobile radio systems. There is little doubt, however, that a post-divestiture environment will tend to accelerate the development of bypass systems.

The potential impact of lost contribution from foregone interexchange message charges from bypass networks may be demonstrated more graphically by the data set forth in Figures 1 and 2. These figures depict the present relationship of intrastate message rates and costs (embedded and incremental) for New York Telephone intrastate toll service (Figure 1), and for intrastate local calling throughout the large downstate metropolitan region encompassing New York City, Long Island, and Westchester-Rockland counties (Figure 2). Similar relationships hold for interstate message characteristics. The authors correctly summarize the potential impact of bypass: "Thus, as bypass technologies become more widely available and less expensive, the less contribution toward local costs will [a BOC] be able to obtain from interexchange services, and the higher will local rates be driven" (Ordover and Willig, p. 276).

The several suggested tariff structures for the construction of network access charges (i.e., two-part tariffs for non-traffic sensitive and traffic sensitive cost recovery, tapered schedules and split charging of the carriers for their access costs, and direct charges to the users for their traffic sensitive costs plus contribution) are all viable approaches. However, none of the approaches will totally preclude the development of bypass technologies. All rate structures in one way or another ultimately pass the higher costs of older technology to the user of the service. Newer technologies with lower production and operating costs will continue to evolve from freer competition. Thus, a pricing structure must be achieved which recovers more quickly the depreciation of changing technologies, and limits the extent of averaging of technologies so evident in past practice.



RATES EXCEED COSTS BY \$150 MILLION

Figure 1. New York Telephone Company graphical display of intrastate toll rates and costs (additional minute for daytime DDD messages).

It is the opinion of this writer, as one who is responsible for the pricing of all telecommunications services provided by New York Telephone Company, that subsidies must be eliminated gradually from all competitive services, and that the BOCs must move ahead at a pace equal to or ahead of the development bypass by developing new technologies to compete effectively with bypass networks. Even this strategy, however, will not preclude the eventual rise in local telephone rates because depreciation charges will have to be increased at a quicker pace to recover the embedded network plant of the remaining technologies. Sunk plant has a continuing cost that must be recovered. In the long run, competition as such and bypass technologies will not reduce consumer prices but rather will afford

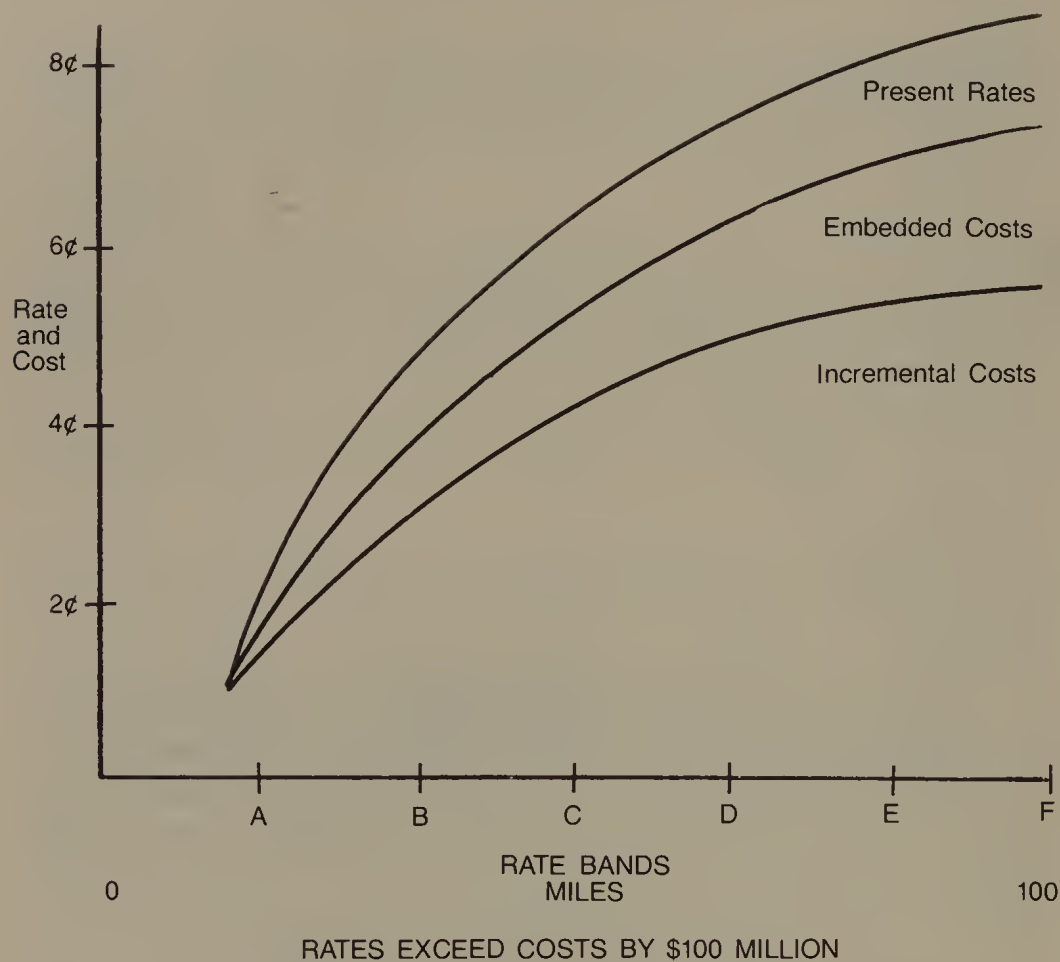


Figure 2. New York Telephone Company graphical display of local call rates and costs (additional minute for daytime period).

consumers the most reasonable prices for a far wider choice of new network services.

The last tenet of the Ordovery-Willig article sets forth the view that Local Measured Service (LMS) is essential in a competitive environment for three reasons: efficient repression of local calls, efficient generation of contributions to the fixed and common costs, and the protection of universal service. The authors again correctly set forth the economic pricing structure on which BOCs will be more dependent in a future post-divestiture era. However, it should be noted that the introduction of LMS throughout the operating territory does not result in the elimination of the predominant flat rate service. In a very long view of the future, one might conceive of an environment of total measurement of all usage on the network. In

the short run, however, flat rate service cannot be eliminated for political reasons. Previous attempts to eliminate this service in various jurisdictions in the past have had disastrous results.

An important point is that flat rate service and LMS can coexist if properly priced. There is no requirement that both services, especially for the residence classification, be subsidized. Hence, because flat rate service may be thought of as the premium service (no additional charges for local calls in the primary calling area), the charges for such service (i.e., non-traffic sensitive loop and traffic sensitive switch) should be moved to compensatory levels. To the extent practicable, the charge could also be designed to generate a contribution to subsidize the LMS access line.

The greatest care in rate design must be devoted to the development of the rate structure and the price levels associated with LMS. Rate levels that are too high—that is, well above embedded local network costs (see Figure 2)—will merely encourage bypass and spur on the dilemma posed by the authors. Rate levels that are too low generate no significant contribution to subsidize the local access line for the promotion of universal service. Thus, a rate-setting challenge exists for the BOCs, especially for those companies such as New York Telephone where the pre-divestiture era was already characterized by significant LMS and high usage rates.

To compete with bypass while maintaining the policy objectives of universal service, the BOCs must develop greater efficiencies in networks and lower overhead costs. Otherwise, to continue to operate LMS and allied local networks in a monopoly mode endangers both the economic viability of the BOC and the policy of universal service.

Ordover and Willig have set forth the correct set of economic and pricing principles to guide the carriers in the post-divestiture era of competitive telecommunications. Significant customer education will be required, however, to achieve those principles, because in the final analysis the pricing of telephone service(s) moves no faster nor becomes more refined than the customer body and the political process permit.