

**FOR WHOM DO THE BELLS TOLL?
THE CASE FOR SEPARATE SUBSIDIARIES**



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THE DISTRICT OF COLUMBIA PUBLIC SERVICE COMMISSION

EXECUTIVE SUMMARY

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The Regional Bell Operating Companies (RBOCs) have been prohibited from manufacturing telephone equipment and providing information services by the Modified Final Judgment (MFJ) that concluded the U.S. Department of Justice's antitrust suit against the American Telegraph and Telephone Company (AT&T) in 1984. Since that time, however, there has been an increasing effort on the part of the RBOCs to obtain legislative relief from the line of business restrictions imposed by the MFJ, including efforts that would change the basic division of business responsibility between long distance and local telephone service.

The need for legislative relief is predicated on the notion that the MFJ is a frozen, static document. This notion is incorrect. The MFJ can be and has been altered. The Court specifically recognized the need for flexibility when it added a waiver process to the agreement signed by AT&T and the Department of Justice. Through this process the U.S. District Court for the District of Columbia granted more than 160 waivers between 1984 and the 1987 triennial MFJ review. Moreover, on appeal of the triennial review decision, the U.S. Court of Appeals for the D.C. Circuit made it even easier to modify the MFJ. The decision permits removal of the restrictions, where no party objects, unless the modification would be certain to lessen competition in the market the RBOCs seek to enter. United States of America v. Western Electric Company, et al. (D.C. Cir., No. 87-5388, Apr. 3, 1990, slip op. at 51-55). The staff of the District of Columbia Public Service Commission questions the RBOCs' aggressive actions to eliminate legislatively the line of business restrictions in light of the demonstrated effectiveness of the waiver process and the recent U.S. Court of Appeals decision.

The argument for removal of the line of business restrictions is grounded on the belief that an increase in the number of sophisticated suppliers in the information services and manufacturing markets (by allowing the RBOCs to enter) will provide consumers with a larger variety of high quality services at reasonable prices. Nevertheless, because of the structure of the RBOCs, such alleged benefits to the public are not assured. It is interesting that while the average consent decree can be expected to be in force for about twenty-five years, this one has been in existence for only six years. Alleged economies of scale and scope are used to support the entrance of RBOCs into long distance.

Notwithstanding the veracity of the arguments for relief of the RBOCs from the line of business restrictions, it is still

necessary to distinguish the new competitive services from the existing monopoly services. This is because the RBOCs would be the largest customers of the new manufacturing ventures and the suppliers of bottleneck monopoly services to the new information services ventures. It is the duty of regulators to ensure that the RBOCs are not placed in a position to abuse their market power and their control of bottleneck facilities. One objective of any proposed legislation must be to ensure that the RBOCs do not use the market power inherent in their local telephone franchises to undermine competition in the markets for telephone equipment, information services, and interLATA services at the expense of monopoly services ratepayers.

In 1989, a bill introduced by Congressmen Swift and Tauke proposed the lifting of the manufacturing and information services restrictions imposed on the RBOCs. In addition, Senator Hollings introduced a bill late in that session that would lift manufacturing restrictions. The Hollings bill has been subsequently revised. Currently, there is an effort in the House Subcommittee to structure a new bill which addresses the line of business restrictions.

The House Subcommittee's draft legislation recognizes the market power of the RBOCs. As a safeguard, it authorizes the Federal Communications Commission (FCC) to establish a set of accounting rules to separate the monopoly franchise telephone operations of the RBOCs from any newly authorized manufacturing and/or information services operations. Whether these accounting rules ever could be effective in safeguarding the interests of the monopoly services ratepayers is highly questionable.

This paper presents the case against the effectiveness of accounting rules as a satisfactory safeguard and supports the use of separate subsidiaries, in conjunction with access to records and other information, as the structure through which manufacturing, information services, and/or interLATA operations of the RBOCs, if authorized, would be undertaken.

The need for structural safeguards is supported by the following:

- * Since divestiture, there has been a dramatic explosion in the number of nonregulated subsidiaries of the RBOCs.
- * RBOC revenues from nonregulated services have grown substantially faster than revenues from regulated services.

- * A decreasing share of capital expenditures for the seven RBOCs has been devoted to supporting regulated services.
- * The diversification of the RBOCs into nonregulated businesses increases the risk of cross-subsidization of these services by monopoly services ratepayers.

The problems with the FCC's fully distributed cost (FDC) methods include the following:

- * The methods do not assign true economic costs to the nonregulated services.
- * The methods overallocate costs to regulated customers.
- * The methods ignore nonbook transfers of valuable information and resources.
- * The methods underallocate the benefits of integration to consumers of regulated services.

The major arguments in favor of separate subsidiaries are as follows:

- * Separate subsidiaries make it easier to detect any cross-subsidization which might occur through procurement practices.
- * There is no evidence that separate subsidiaries are more costly than the use of FDC methods.
- * Separate subsidiaries protect the monopoly ratepayers from losses associated with the risk of failure.
- * Separate subsidiaries facilitate the monitoring of intracorporate transactions.
- * Separate subsidiaries eliminate the need to develop accounting rules which prohibit the transfer of costs to ratepayers.
- * Separate subsidiaries protect the general public from anticompetitive activities.

Many arguments have been made by the RBOCs against the use of a separate subsidiaries structure to implement new line of business activities. We find, however, that separate subsidiaries have facilitated telephone company diversification, for example, cellular and Yellow Pages. The issue of how far into the vertically integrated structure of an RBOC to extend a separate

subsidiary is not an insurmountable barrier. The Securities and Exchange Commission (SEC) has been regulating public utility holding companies under the Public Utility Holding Company Act for more than fifty years.

It has been said that separate subsidiaries are not workable because of the nature of the technology. This is untrue because the primary consideration for many services is not the nature of the technology but how a particular service will be provided using the available technological choices. It is clear that a separate subsidiary structure for the provision of new services by the RBOCs does not inhibit the introduction of new services, does not impede competition in certain markets, and does not cause consumer disruptions.

As regards the separate subsidiary structure recommended herein, several safeguards must be considered, as follows:

- * There must be a separate capital structure.
- * The FCC and the state commissions must have the right to review affiliate interest transactions and the authority to establish rules governing affiliate interest transactions.
- * The subsidiaries must share only a chief executive officer and a limited number of directors.
- * RBOCs must not be allowed to merge with or acquire companies which have a market share of 5 percent or more, or several companies which have a combined market share of 10 percent or more.
- * The RBOCs must be prohibited from lending money or assets or from purchasing the debt instruments of the other subsidiaries of its holding company.

This paper recommends that the separate subsidiary structure, for the most part, follow the requirements of the consent decree governing GTE Corp. U.S. v. GTE Corp., 1985-1 Trade Cases 66,355 (D.D.C. 1984). The separate subsidiary structure in this paper differs from the GTE Corp. consent decree in the following three areas: The paper urges (1) that transfers of assets between subsidiaries be subject to regulation by federal and state commissions; (2) that affiliate membership on the subsidiary's board of directors shall be limited to 20 percent; and (3) that the financing of the subsidiary shall be separate from its parent. Otherwise, the paper adopts the GTE consent decree structure.

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69 Rules. In state jurisdictions, cost studies are used as guideposts for rate increases and decreases.

4. Testing is done for cross-subsidization, predatory pricing (prices below costs), and other anticompetitive practices. In the federal jurisdiction, a net benefits test is used to determine if certain new services are either self-supporting or being subsidized. In state jurisdictions, positive (or negative) revenue above (or below) directly assigned costs has been used as an indicator of cross-subsidization.

II. Purpose

The purpose of this paper is twofold: (1) provide a critical analysis of the uses of the FDC methods and (2) develop a case for an alternative approach - separate subsidiaries - as superior to FDC methods (as well as other cost allocation methods) in achieving the desired nonprice goals listed above.¹ This paper will show that FDC methods are ineffective in achieving their objectives. Experience with separate subsidiaries shows, on balance, that the benefits outweigh the costs.

The trends toward competition and increased diversification in the telecommunications industry contribute to an even greater need for the use of structural separations. For example, accounting methods are shown to be inadequate in detecting unlawful conduct and thus inhibit the development of sustainable market competition. In contrast, separate subsidiaries can facilitate competition, thereby increasing the availability of services to customers at lower prices.

The remainder of this paper is organized into seven major sections. Background and contextual information is provided in Section III. A discussion of the definitions of key terms is provided in Section IV. The purpose of Section V is to describe the need for structural safeguards, such as separate subsidiaries. Section VI provides an analysis of the problems associated with the use of the FDC methods. In Section VII, the arguments in favor of the use of separate subsidiaries are presented. In Section VIII, several of the arguments against the use of separate subsidiaries are refuted. Finally, the purpose of Section IX is to describe the issues associated with the implementation of separate subsidiaries.

¹ The use of FDC methods for pricing purposes will not be addressed here because it goes beyond the scope of this study. For a discussion of the use of FDC methods for pricing purposes, see Stephen J. Brown and David S. Sibley, The Theory of Public Utility Pricing (Cambridge: the University Press, 1986), pp. 43-60; and James C. Bonbright, Albert L. Danielsen, and David R. Kamerschen, Principles of Public Utility Rates (Arlington: Public Utilities Reports, Inc., 1988), pp. 614-22.

III. History of Separate Subsidiaries and Cost Allocations Methods

A. Introduction

The Modified Final Judgment (MFJ) in the American Telephone and Telegraph (AT&T) divestiture case established the seven Regional Bell Operating Companies (RBOCs). Under the MFJ's "line of business" restrictions, the RBOCs have been prohibited from manufacturing telephone equipment and from providing information services and interLATA toll service. The Congressional Staff draft bill now under consideration in the U.S. Congress proposes to remove these "line of business" restrictions. Proponents believe that an increase in the number of sophisticated suppliers in these markets will provide consumers with a larger variety of high quality services at reasonable prices.

Even if this belief is correct, removal of the restrictions is not necessarily a panacea. This policy change may carry with it the opportunity for abuse of the monopoly power latent in the telephone exchange market. For example, the RBOCs will be in a position to shift the costs of manufacturing or the provisioning of information services which are nonregulated to the regulated telephone exchange services. They also may have the incentive to shift the benefits (including profits) of the joint production of both regulated and nonregulated services in the opposite direction, from the regulated to the nonregulated business. This shifting of costs and benefits in opposite directions constitutes a cross-subsidization of the nonregulated business by the traditionally regulated business.

Two consequences of cross-subsidization can ensue. First, the RBOCs will be able to destroy the profit incentive for other suppliers to enter the markets. The RBOCs can retain control of the rate of technical change, the introduction of new products, and the price of these products. Under these circumstances, the evolution and sustainability of competition will be threatened.

Since rapid technological change can make investments obsolete in a short period, slowing the introduction of new technology in a very capital-intensive industry allows for the recovery of the costs associated with the old technology. In telecommunications, the slow introduction of the electronic switches and the long life of electromechanical switches (such as crossbar switches) are dramatic examples of this strategy by the telephone companies.²

² Kenneth Flamm, "Technological Advance and Costs: Computers versus Communications," in Changing the Rules: Technological Change, International Competition and Regulation in Communications, edited by Robert W. Crandall and Kenneth Flamm, (Washington, D.C.: The Brookings Institution, 1989), p. 24.

Control of new product introduction also allows the RBOCs to decide which products will be available to the consumers. A company will make this decision on the basis of profitability, not on the basis of customer needs. For example, in the late 1970s, AT&T adopted a strategy to encourage customers to move from Centrex service to customer premises equipment, such as Private Branch Exchanges (PBXs). As part of this so-called migration strategy, the software that runs electronic switches was not upgraded to provide advanced Centrex features. Thus, customers who wanted these features were forced to buy or lease PBXs.³ Under the rules of the MFJ, AT&T retained ownership of the existing PBXs and the right to manufacture new PBXs. The RBOCs were left with the declining, but still very large Centrex market. In order to maintain their Centrex customer base, the RBOCs have had to offer significant discounts on the service and have scrambled to upgrade service quality.

The second consequence of cross-subsidization is the income distribution shift away from customers of monopoly services to customers of competitive services. In telecommunications, the monopoly services are considered necessities purchased by all groups in society, whereas the competitive services often are discretionary. The latter will be purchased by those who have discretionary income or a pressing need for the particular services. Cross-subsidization, by raising prices for monopoly services and lowering prices for competitive services, will have a tendency to reduce the real income of families with lower income as opposed to higher income.

The ability of the RBOCs to cross-subsidize is facilitated greatly by the use of cost allocation methods, and particularly the FDC methods. This paper will illustrate, through numerous examples, how the cost allocation methods and the adverse market effects are intertwined.

B. History of Cost Allocation Methods

Cost allocation procedures first were applied to the separation of AT&T's costs between interstate and state jurisdictions. In 1930, the Supreme Court ruled that some part of the local plant investment was used to provide long distance services and thus properly was allocable to the interstate jurisdiction. Seventeen years later, on October 22, 1947, the first Separations Manual was approved. This manual used subscriber

³ F. D. Ziegel, The Private Branch Exchange Market (New York: Salomon Brothers, Inc., May 1984), p. 7.

line usage (SLU) as a measure of relative use in order to separate plant costs between federal and state jurisdictions.⁴

Over the years between 1947 and 1981, SLU was replaced by other allocators. The amount of local exchange plant allocated to the interstate jurisdiction, averaged across all states, gradually rose from 3 percent to 26 percent. For some states, allocation to the federal jurisdiction rose more than 50 percent over the same period.

After divestiture in 1984, however, the FCC approved a separations policy for the Local Exchange Carriers (LECs) that caps the allocation of local plant investment to the federal jurisdiction at 25 percent by 1992. States with allocation factors other than 25 percent were given eight years during which to reach this cap.⁵ The revenue requirement associated with the federal allocation is to be collected not only from the interexchange companies (the practice prior to 1984), but also from residential and business customers through subscriber line charges.

The FCC's first investigation into the relationship between costs and rates for AT&T was instituted in 1962.⁶ As part of this docket, the FCC ordered AT&T to conduct an FDC study. The results of the study showed that the rate of return earned on individual services varied widely. Many observers considered this an indication that the monopoly services were subsidizing the competitive services.⁷

The FCC initiated several other dockets to address the question of the proper cost standard for individual services. In

⁴ It is interesting to note that SLU counts every state minute twice and every interstate minute once.

⁵ In the Matter of MTS and WATS Market Structure Amendment of Part 67 of the Commission's Rules and Establishment of a Joint Board, Decision and Order, CC Docket Nos. 78-72 and 80-286 (December 28, 1984), 50 Fed. Reg. 939 (January 8, 1985).

⁶ Report of the Telephone and Telegraph Committees in the Domestic Telegraph Investigation, Docket No. 14650 (FCC, December 21, 1966).

⁷ Alfred E. Kahn, The Economics of Regulation: Principles and Institutions, 2 vols. (New York: John Wiley & Sons, Inc., 1970), I, p.157.

1976, it concluded that a forecasted FDC procedure was the most appropriate mechanism for determining service-specific costs.⁸

Applying these standards to individual AT&T tariff filings proved to be a very arduous and frustrating process for the FCC. In 1989, the FCC replaced cost-based rate procedures with a price cap mechanism for AT&T. For the RBOCs, however, the FCC still uses projected FDC methods to set the revenue requirements for switched access prices.

For special access services (such as private line service direct from an end user to an interexchange carrier), the FCC experimented with alternatives to cost-based rates.⁹ The prices of special access services were allowed to move away from the cost of the service. In particular, the prices of services using new, more efficient technologies were raised significantly above cost, while the prices of services using older technologies were lowered relative to cost.

The purpose of this experiment was to manage the migration from the old technology to the new technology. This return to cost-based rates, however, is not the FCC's preferred long-run solution.¹⁰ In 1989, the FCC adopted price cap regulation for the RBOCs, but it has yet to determine the form of the price cap regime. Under price cap regulation, individual service prices must remain within certain bands but are free to move away from costs.¹¹

Finally, the FCC has adopted a forecasted FDC methodology to separate costs between regulated and deregulated services.¹² The

⁸ Walter G. Bolter, "The FCC's Selection of a 'Proper' Costing Standard After Fifteen Years--What Can We Learn from Docket 18128?" in Assessing New Pricing Concepts in Public Utilities, edited by Harry M. Trebing (East Lansing: College of Business, Michigan State University, 1978), pp. 333-72.

⁹ Investigation of Special Access Tariffs of Local Exchange Carriers, CC Docket No. 85-166, Phase II, Part 1, FCC 88-321 (December 1, 1988).

¹⁰ See Telecommunications Reports, 55, No. 48 (December 4, 1989): 1-4.

¹¹ Policy and Rules Concerning Rates for Dominant Carriers, CC Docket No. 87-313, Report and Order and Second Further Notice of Proposed Rulemaking, FCC 89-91, (April 17, 1989).

¹² In the Matter of Separation of Costs of Regulated Telephone Service from Costs of Nonregulated Activities, CC Docket No. 86-111, Report and Order (October 16, 1987).

forecasts are used to allocate plant and equipment that is used to produce both regulated and deregulated services.

C. History of the Use of Separate Subsidiaries

The use of separate subsidiaries rests on a long history of positive experience. In 1966, the FCC initiated Computer Inquiry I,¹³ the subject of which was the relationship between communications and computer-related technologies. In its March 1971 Computer Inquiry I Order, the FCC decided not to regulate the computer-related services but instead required the carriers to provide such services through separate subsidiaries. The subsidiaries had to maintain their own financial records as well as use separate personnel, computer equipment, and facilities. They were allowed to share administrative and corporate overhead expenses with the regulated carrier. The purpose of the so-called structural separations was to prohibit any joint costs from being shifted between the regulated and nonregulated services.¹⁴

Between 1971 and 1986, the FCC affirmed the use of separate subsidiaries through a series of decisions. In 1976, the FCC initiated Computer Inquiry II.¹⁵ The decision was rendered before divestiture on May 2, 1980, and thus was applicable only to AT&T. In the Order, the FCC created a regulatory distinction between basic and enhanced services. The latter were deregulated but the telephone companies were required to offer nonregulated enhanced services through structurally separate subsidiaries. The FCC maintained the separate subsidiaries requirement both to control the ability of carriers to discriminate against competitors and to facilitate the detection of cross-subsidization. The rationale was to protect telephone customers from subsidizing nonregulated competitive activities and to protect competitors from unfair anticompetitive behavior (such as predatory pricing) by making it easier to detect such abuses.

¹³ Computer & Communications Industry Assn. v. FCC, 693 F.2d 198 (D.C. Cir. 1982), cert. denied, 461 U.S. 938 (1983).

¹⁴ The FCC did not apply Computer Inquiry I to AT&T because AT&T was barred from offering these services by the 1956 Consent Decree.

¹⁵ In the Matter of Procedures of Implementing the Detariffing of Customer Premises Equipment and Enhanced Service (Second Computer Inquiry), 77 F.C.C.2d 384 (1980), recon., 84 F.C.C.2d 5 (1985), further recon., 88 F.C.C.2d 512 (1981), aff'd sub nom., Computer and Communications Indus. Assn. v. FCC, 693 F.C.C.2d 198 (D.C. Cir. 1982), cert. denied, 461 U.S. 938 (1983).

In May 1986 the FCC issued an order in Computer Inquiry III which instituted "nonstructural safeguards in place of the separate subsidiaries on the grounds that separate subsidiaries were inefficient and restricted the introduction of new technology into the marketplace."¹⁶ The nonstructural safeguards were premised on fully distributed costing methods as adopted in a related FCC Order in December 1986.¹⁷

Subsequent analysis will clearly show why the FDC methods, required by the FCC in Computer Inquiry III, do not adequately address concerns related to cross-subsidization and predation. Moreover, these concerns are now heightened by the changing telecommunications and regulatory framework at both the federal and state level. Therefore, it is especially important that the case for the use of separate subsidiaries be revisited in light of recent events. This analysis will indicate the superiority of the separate subsidiary approach over current FDC accounting methods.

¹⁶ In the Matter of Amendment of Section 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry), 104 F.C.C.2d 958 (1986).

¹⁷ In the Matter of Separation of Costs of Regulated Telephone Service from Costs of Nonregulated Activities, CC Docket No. 86-111, Report and Order (October 16, 1987).

IV. Definitions of Terms

An understanding of the issues involved in the choice of separate subsidiaries versus FDC methods requires that a number of concepts be defined. The purpose of this section is to provide that conceptual foundation. The principle concepts are listed as follows:

- A. Common and Joint Costs
- B. Economies of Scale
- C. Economies of Scope
- D. Cross-subsidization
- E. Cross-subsidization in the Telephone Industry
- F. Predation and Other Anticompetitive Practices.

Defining these terms is not a trivial task. A review of the literature shows that they often are used with varying meanings. Some definitions have been derived for specific purposes but are used in another context to mean something else, or are applied in ways which do not comport with sound economic theory. It thus will clarify the arguments presented in this paper if we first define these concepts.

A. Common and Joint Costs

Common and joint costs arise when the same inputs are used to produce several outputs. In other words, common and joint costs are the total costs associated with an input that is used to produce more than one good.

The difference between these two costs often depends on whether the analyst is an accountant or an economist. The accounting definitions normally are used in telephone rate cases.

According to the accountants, the common costs of doing business are those costs that are not directly attributable to a particular product or service. Examples are legal department, treasury, and executive office costs.

Joint costs, also according to the accountants, are associated with the multiple use of an investment or labor that can be directly associated with a particular product or service. Even though a direct association exists, it is still necessary to use a reasonable allocation mechanism to assign a portion of these costs to each product. Examples are the costs incurred for switching equipment, inter-office trunks, and circuit equipment.

According to the economists, common costs are associated with an input used to make more than one product, when producing more of one unit reduces the capacity available to produce another.¹⁸ Switching equipment, inter-office trunks, and circuit equipment are examples.

Joint costs, according to the economists, are those attributable to producing joint products, that is, products that can be produced only in fixed proportions. Examples include meat and hides of animals as well as cotton fiber and cotton seeds.

Economists and accountants agree that assigning common costs to a particular product includes a greater degree of judgment and arbitrary decision-making than does assigning joint costs. Economists define a significant amount of telephone costs as common, while accountants define most telephone costs as joint. Therefore, economists, more so than accountants, would state that cost assignment in the telephone industry is arbitrary.¹⁹

B. Economies of Scale

Economies and diseconomies of scale describe the relationship between changes in the quantity produced of a single product and proportionate increases in all of the inputs needed to produce that product. Economies of scale results when output increases by a greater proportion than the increase in inputs: for example, if all inputs increase by 10 percent, and output increases by more than 10 percent. Diseconomies of scale result from the reverse: if all inputs increase by 10 percent and output increases by less than 10 percent.

The first practical implication is that the average cost of production falls when economies of scale exist. The second implication is that, if economies of scale persist over the entire range of output that consumers wish to purchase, it is cheaper to allow that output to be produced by a monopoly rather than by a group of competitive firms. Economies of scale often is given as a principal reason for the existence of monopolies and hence the need for regulation.

¹⁸ Alfred E. Kahn, The Economics of Regulation: Principles and Institutions, 2 vols. (New York: John Wiley & Sons, Inc., 1970) I, p. 78.

¹⁹ For a discussion of the economic definitions, see Alfred Kahn, The Economics of Regulation: Principles and Institutions, 2 vols. (New York: John Wiley and Sons, Inc., 1970) I, pp. 77-83; for a discussion of the accounting usage, see "Toll and Carrier Access Service Cost Study Manuals" filed with the New York State Public Service Commission as ordered in Case 28425, Opinion No. 87-11, issued June 11, 1987.

C. Economies of Scope

Firms producing more than one product may enjoy economies of scope, formally defined as the existence of the condition of subadditivity of costs. This condition states that the sum of the costs of all suppliers attempting to produce a certain quantity of a variety of products is greater than or equal to the costs of one supplier producing the same variety of goods.²⁰ In practice, economies of scope refer to the cost savings from producing several products together compared to producing them independently.

D. Cross-subsidization

A cross-subsidy exists if the cash flow generated by the sale of one product supports the provision and sale of another. Any firm that sells two or more products can engage in cross-subsidization.

Two distinct definitions of cross-subsidization have been employed by researchers and analysts to evaluate intrafirm cash flows. These definitions seek to clarify what it means for one product to support another.

The first definition states that a cross-subsidy exists if the profit rate on investment for a given product is lower than the average profit rate on investment earned by the firm on all its products. In order to use this definition, it is necessary to assign all revenue, costs, and investments by product line, including an allocation of all common and joint costs. Since it is necessary to allocate the entire or full costs of the company, this definition is called the fully distributed cost definition of subsidy.

The second definition can be stated in two ways. The first is to say that if the revenue received by a firm for a product is greater than the stand-alone cost of providing that product, then the customers purchasing that product are subsidizing other products of the firm. Stand-alone cost is equal to the total cost of providing one product completely independent of provision of any other. The second is to say that a cross-subsidy exists if customers are paying less than the incremental cost of production. Incremental costs are the costs of providing an additional product, given that the firm already is producing several other products.²¹

²⁰ William J. Baumol, "On the Proper Tests for Natural Monopoly in a Multiproduct Industry," American Economic Review (December, 1977): 809-22.

²¹ U.S. General Accounting Office, Telephone Communications: Controlling Cross-Subsidy Between Regulated and Competitive Services, October 1987, p. 11.

Determining a value for stand-alone costs is a difficult procedure. In today's markets, products seldom are produced independent of other products. Any stand-alone cost estimates that have been developed are based on engineering economy studies. Incremental cost estimates also are very difficult to determine, since assumptions must be made about the technical relationships among products. Most incremental cost estimates also are developed using engineering economy models. Given the use of economic principles and analysis in developing estimates of stand-alone and incremental cost, the second definition is called the economic definition of subsidy.

E. Cross-subsidies in the Telephone Industry

Within the telephone industry, cross-subsidy has been a major feature of two debates. First, there is the ongoing dispute about the amount of financial support long distance service should provide to local service. The conventional wisdom in the industry has been that long distance service has subsidized local service. Second, there is the debate concerning the relationship between monopoly and competitive services. Every time a telephone company offers a new service, such as voice mail, a competitor claims that the alternative service provided by the telephone company is being subsidized by the monopoly ratepayers. These claims will be evaluated here in light of the two definitions of cross-subsidy provided above.

Long distance service always has provided some form of payment to the local exchange carrier (LEC).²² Formerly, this payment was provided to the LECs through a division of revenue procedure internal to the AT&T companies and a settlement procedure between AT&T and the LECs. Since divestiture, the settlements have been based on the payment of access rates by long distance carriers to the LECs.

The claim that this payment from long distance to local service is a subsidy is based on embedded cost studies, which make the arbitrary assumption that local ratepayers are responsible for 100 percent of the costs of the local loop (the system of wires, poles, and conduits connecting customers to the telephone company's switches). This assumption violates the cost allocation principles established by the FCC in its Separations Manuals, wherein the local loop is recognized as an essential facility for the delivery of long distance service. Moreover, Judge Greene noted that "once

²² Local exchange carriers (LECs) include both the Bell Operating Companies (BOCs) and all other operating companies such as GTE's affiliated exchanges and the more than 1000 independent companies.

AT&T is divested of the local Operating Companies, it will be unable to either subsidize the prices of its interexchange service with revenues from local exchange services or shift costs from competitive interexchange services."²³ His statement implies that the direction of the subsidy is from local to long distance rather than vice versa.

Recently, the FCC initiated an investigation of the status of competition in the interstate interexchange market. It has tentatively concluded that the interexchange market has become competitive due to divestiture, among other factors. In its discussion of the effects of divestiture, the FCC quoted the above statement from Judge Greene's decision.²⁴ Therefore, by implication, the FCC now recognizes that the payment from long distance to local service is not a subsidy. Instead, it is an inadequate payment for services rendered to long distance services by the local network.

If 100 percent of the cost of the local loop is arbitrarily assigned to local services, however, it is predetermined that local service will provide a low, if not negative, return on investment. This return is calculated after all the costs of the telephone system are allocated across the various services. Therefore, the subsidy claim is based on the arbitrary assignment of costs within an FDC study and thus is based on the fully distributed cost definition of subsidy.

Alternatively, if the economic definition of subsidy is used, it is impossible to claim that the cash flow from long distance to local service is a subsidy. Using this definition, the incremental cost of local service is simply the additional switching cost of providing local service. All the overhead costs, the baseline cost of the switch and its software, and the cost of the local loop are necessary to provide long distance service. Since local revenues always have been sufficient to cover additional switching costs, there is no subsidy from long distance to local service. Moreover, as long as local service revenue is greater than its incremental cost, and long distance revenues are less than their stand-alone costs, the long distance service customer is not being overcharged.

The second debate, concerning the relationship between monopoly and competitive services, began immediately following the

²³ United States v. AT&T, 552 F. Supp. 131, 172.

²⁴ In the Matter of Competition in the Interstate Interexchange Marketplace, CC Docket 90-132, Notice of Proposed Rulemaking (April 13, 1990), at 39.

Above 890 Decision by the FCC.²⁵ This decision was the FCC's first attempt to use competition to bring new services to consumers at a rate faster than experienced under the monopoly environment. The Above 890 Decision allowed private carriers to enter the private line market. The immediate response by AT&T was to offer the TELPAK tariff, which offered discounts to large users of the private line service. A customer who previously had paid \$75,600 per month to rent 240 lines now would receive the same service for only \$11,700.²⁶ These sharp discounts would have destroyed the profit potential of AT&T's rivals.

When competitors, such as Western Union and Motorola, complained to the FCC, investigations were launched to determine whether TELPAK customers were being subsidized. The FCC ordered AT&T to conduct an FDC study (known as the seven-way cost study because costs were stretched across seven services: Message Toll Service, WATS, Teletypewriter Exchange Service, Telephone Grade Private Line, Telegraph Grade Private Line, TELPAK, and "all other" offered from September 1, 1963 to August 31, 1964). The results showed that TELPAK was earning a return of only 0.3 percent on investment, compared to its average rate of return of 7.5 percent. (AT&T earned a 10.0 percent return on Message Toll Service, traditional long distance calling by residence and business customers which was a monopoly service at that time.²⁷) Therefore, using the fully distributed cost definition, TELPAK was being subsidized.

The FCC subsequently ordered AT&T to withdraw the TELPAK options for smaller customers. The tariff for large customers remained in place while the FCC examined the proper ratemaking standards for private line services facing competition. During the investigation, AT&T sponsored testimony that provided the foundation for the economic definition of subsidy. It claimed that as long as a service provided revenue at least as great as long-run incremental costs, the service was not receiving a subsidy. If the service provided revenue greater than its long-run incremental cost, the customers of the monopoly services benefitted through a reduction in the burden of common costs. Furthermore, AT&T claimed that pricing according to long-run incremental costs was proper for

²⁵ Bernard Herber, "The Impact of Microwave on the Telephone Business," Public Utilities Fortnightly 70 (1962):214, 215.

²⁶ Gerald W. Brock, The Telecommunications Industry (Cambridge, Mass.: Harvard University Press, 1981), p. 207.

²⁷ AT&T Exhibit 81, Attachment A, p. 4, FCC Docket 14650.

services facing competition because this price-cost relationship would be the most efficient way to provide the service.²⁸

In theory, the incremental cost pricing principle appears to be reasonable. In practice, immense amounts of data and estimates are needed to construct an incremental cost estimate. Such concepts as price and cross-price elasticities of demand must be estimated, and the effects on the costs of the entire telephone network of adding and subtracting individual services must be determined.

The problems associated with the incremental cost standard led the then chairman of the FCC to write:

If the telephone industry is allowed to selectively price its services incrementally, the Congress would be guaranteeing the shortfalls in those estimates of future costs will be borne by the public telephone rate payer. In other words, telephone rate payers would pay the costs of company errors or predatory pricing of competitive services.²⁹

The FCC ruled that the remaining TELPAK tariffs were not cost justified and ordered the tariff removed by June 1977, but large users appealed that decision. Interstate TELPAK service was finally terminated in 1981, twenty years after it was introduced and fourteen years after it was shown that TELPAK was a subsidized service.

More recently, in its joint cost docket, the FCC addressed the issue of the proper method for separating the costs of regulated telephone service from the costs of the nonregulated activities of the telephone companies and their affiliates. In this case, the FCC also adopted an FDC standard, the reason being that "our goal of just and reasonable treatment of ratepayers requires that ratepayers participate in the economies of scale and scope which we believe can be achieved through integration of nonregulated

²⁸ Walter G. Bolter, "The FCC's Selection of a 'Proper' Costing Standard after Fifteen Years - What Can We Learn From Docket 18128?" in Assessing New Pricing Concepts in Public Utilities, edited by Harry M. Trebing (East Lansing: College of Business, Michigan State University, 1978), pp. 333-72.

²⁹ Letter from Richard E. Wiley to Lionel Van Deerlin, House Subcommittee on Communications, September 23, 1976, cited in Leland L. Johnson, Competition and Cross-Subsidization in the Telephone Industry (Santa Monica: Rand Publication Series, 1982), p. 14.

enhanced services within the basic service network."³⁰ This implies that the FCC, despite its often frustrated attempts to apply FDC standards, continues to believe that FDC is the proper method for measuring cross-subsidization and separating costs between monopoly (regulated) and competitive (nonregulated) services.

F. Predation and Other Anticompetitive Practices

Predatory pricing, as defined by Richard Posner, refers to "the practice whereby a firm having a monopoly position in a number of local markets sells below cost in those markets in which it has competitors."³¹ After the competitors are eliminated, the monopolist raises the price in the formerly competitive market to the monopoly level.

It has been alleged that such practices are more likely to occur if the firm operates in more than one line of business or offers more than one product or service. It also has been alleged that regulated firms have greater incentives to engage in predatory pricing than do nonregulated firms. For example, in the U.S. v. AT&T antitrust case, Judge Greene noted that "the opportunity which a multiproduct firm subject to rate of return regulation has to cross-subsidize low prices for one product across other products (rather than across time) renders it far more likely to engage in anticompetitive pricing than the firm that must hope to recoup its losses."³²

The result of predatory and other anticompetitive practices is to eliminate rivals and thereby reduce social welfare. The latter occurs in two ways. First, with competition eliminated, the monopolist can raise the price and thereby restrict output to a level below what is socially desirable. Second, the elimination of competition reduces the incentive to produce efficiently.

Economists use marginal or incremental costs as the standard against which to measure whether prices are predatory. The courts, however, have found pricing without regard to cost to be an adequate basis for predatory pricing.³³ The FCC has used yet another standard, FDC methods, which requires that the price for

³⁰ In re Separation of Costs of Regulated Telephone Service from Costs of Nonregulated Activities, CC Docket No. 86-111, Report and Order (February 1987), para. 109.

³¹ Richard Posner, Antitrust: Cases, Economic Notes, and Other Materials (St. Paul: West Publishing Co., 1974), p. 361.

³² U.S. v. AT&T, 524 F. Supp. 1336, 1369 (D.D.C. 1981).

³³ Id., pp. 1364-70.

each service covers its own marginal costs and a share of the common costs of the company.

Predation can occur even if prices are above marginal costs. In fact, predation encompasses more than predatory pricing. Other examples include predatory spending, threats, litigation, patent manipulation, or any other activity intended to intimidate competitors.³⁴

Charges of predatory pricing can be traced back to the expiration of the Bell patents in 1894, at which time the independent telephone companies began to offer telecommunications services throughout the country. Shortly thereafter, around the turn of the century, the Bell exchanges and the independent telephone companies accused one another of predatory pricing. AT&T claimed that the independents forced AT&T's exchanges to match rates that were not based on a proper measurement of cost, and thus the prices offered were not remunerative. The independents rejoined that the Bell companies were "giving away their service after an independent company had been started."³⁵ As evidence, the independents claimed that although AT&T, the holding company, was charging the Bell exchanges 50 cents per year for renting telephones, these same Bell exchanges were simultaneously offering their telephone service for 50 cents.³⁶ Only a holding company such as AT&T, operating in both monopoly and competitive environments, could reduce its profit margins to zero in the competitive arena while earning a healthy return in the monopoly markets. Independents which were not operating in diverse markets were severely handicapped by AT&T's pricing tactics.

Another example of predatory pricing came before the FCC and the courts in the early to mid-1970s as a result of conflicts between AT&T and specialized common carriers. Particular attention should be given to the experience of Data Transmission Corporation (Datran), which built a nationwide digital microwave network with the express purpose of serving computer data transmission needs. This innovative service was initiated in 1973.

³⁴ See William G. Shepherd, The Economics of Industrial Organization (Englewood Cliffs: Prentice-Hall, Inc., 1979), p. 324; Basil Yamey, "Predatory Price Cutting: Notes and Comments," Journal of Law and Economics 15 (April 1972):129-42; and Philip Areeda and Donald F. Turner, "Predatory Practices under Section 2 of the Sherman Act," Harvard Law Review 88 (1975):697-733.

³⁵ Telephony, January 1901, p. 16.

³⁶ See David S. Evans, Breaking Up Bell (New York: North-Holland, 1983), p. 21.

The AT&T response was twofold: first, it built its own digital network, and second, it set rates for the digital service significantly below rates for its analog service. Datran protested the AT&T rates. In June 1976, an administrative law judge found the initial AT&T rates to be unreasonable. The FCC affirmed the law judge's decision in 1977, by which time Datran was bankrupt.³⁷

Another conflict, between the specialized common carrier, MCI, and AT&T, was resolved through the courts. MCI claimed that AT&T had engaged in predatory pricing on the ground that prices were below fully distributed costs. The appeals court ruled that the proper standard was the long-run incremental cost because it relied on a theory that explained how reasonable individuals would behave in a competitive market. As long as there was a match between the behavior being examined in a particular market and the theoretically reasonable behavior, the actual behavior was deemed to be legitimate.³⁸

³⁷ Gerald W. Brock, The Telecommunications Industry (Cambridge, Mass.: Harvard University Press, 1981), pp. 215-24. On October 19, 1976, Datran's assets, free and clear of liens, were sold at auction for \$4.9 million. Datran retained its accounts receivable and interest in its antitrust suit against AT&T. See Telecommunications Reports, 42, No. 43 (October 25, 1976): p. 12.

³⁸ MCI Telecommunications v. AT&T, 708 F.2d 1081, 1119-1123 (C.A. 1983).

V. Need for Structural Safeguards

The diversification plans and activities of the RBOCs have been most ambitious since divestiture. This is evidenced in the growth in the number of nonregulated subsidiaries, in the relatively rapid growth of revenues from nonregulated services, and in the diversion of capital expenditures away from regulated subsidiaries. The purpose of this section is to present the empirical evidence and to highlight the importance and implications of these changes.

A. Growth in Number of Nonregulated Subsidiaries

The changes in the corporate organizational structure of the RBOCs since divestiture is illustrated by the case of Bell Atlantic. Tables V.1 and V.2 present Bell Atlantic's subsidiaries as of January 1, 1984 (the start of divestiture) and as of December 29, 1989. Table V.1 contains a list of Bell Atlantic's network services subsidiaries and Table V.2 lists the nontelecommunications subsidiaries of Bell Atlantic.

Table V.1. shows the number of network-related subsidiaries, which includes Bell Atlantic's seven (7) local exchange companies, altered very little over the six-year period. There were only three changes, all occurring in 1988. These were: (1) the addition of the Bell Atlantic Knowledge Systems, Inc. subsidiary as part of C&P of West Virginia; (2) the creation of Bell Atlantic Network Funding Corporation as a subsidiary of Bell Atlantic Network Services, Inc; and (3) Bellcore was transferred to Bell Atlantic Network Services, Inc.

Table V.1
BELL ATLANTIC'S NETWORK SERVICES

AS OF JANUARY 1, 1984

Network Services

Bell Atlantic Network Services,
Inc.
New Jersey Bell Telephone
Company
The Bell Telephone Company of
Pennsylvania
The Diamond State Telephone
Company
The Chesapeake and Potomac
Telephone Company
(Washington, D.C.)
The Chesapeake and Potomac
Telephone Company (Maryland)
The Chesapeake and Potomac
Telephone Company (Virginia)
The Chesapeake and Potomac
Telephone Company
(West Virginia)
Bell Communications Research,
Inc. (one-seventh ownership)

AS OF DECEMBER 29, 1989

Network Services

Bell Atlantic Network Services,
Inc.
►Bellcore (Bellcommunications
Research, Inc. one-seventh
ownership)
►Bell Atlantic Network Funding
Corporation
New Jersey Bell Telephone
Company
The Bell Telephone Company
(Pennsylvania)
The Diamond State Telephone
Company
The Chesapeake and Potomac
Telephone Company
(Washington, D.C.)
The Chesapeake and Potomac
Telephone Company (Maryland)
The Chesapeake and Potomac
Telephone Company (Virginia)
The Chesapeake and Potomac
Telephone Company
(West Virginia)
►Bell Atlantic Knowledge
Systems, Inc.

Table V.2
THE "GROWING FAMILY" OF BELL ATLANTIC'S NONREGULATED SUBSIDIARIES

AS OF JANUARY 1, 1984

AS OF DECEMBER 29, 1989

Enterprises

Bell Atlantic Mobile Systems, Inc.
 ▶ 12 Operating Subsidiaries
 Bell Atlantic Enterprises, Inc.
 ▶ Bell Atlantic Ventures, Inc.
 ▶ Bell Atlantic Ventures Services, Inc.
 ▶ Bell Atlantic Financial Services, Inc.

Bell Atlantic Investments Inc.

Bell Atlantic Enterprises Corp.
 ▶ Bell Atlantic Systems Integration Corp.
 ▶ Bell Atlantic Mobile Systems Inc.
 • 9 operating Subsidiaries
 • Bell Atlantic Cellular Consulting Group, Inc.
 • Bell Atlantic Paging, Inc.
 ▶ Bell Atlantic Customer Services, Inc.
 • Sorbus, Inc.
 • Sorbus Canada, Inc.
 • Electronic Service Specialist LTD
 • Carnex - CPX, Inc.
 • Bell Atlantic Ventures XII, Inc.
 • Bell Atlantic Customer Services International, Inc.

o Sorbus Europe Limited
 Bell (UK) Services Limited
 Bell (UK) Communications Limited
 Sorbus (UK) Limited
 o Sorbus BV
 Eurotechnica S.A.
 Eurotech Italia SpA
 Eurotech GmbH
 Sorbus GmbH
 Sorbus AG
 Sorbus Gcs mbH

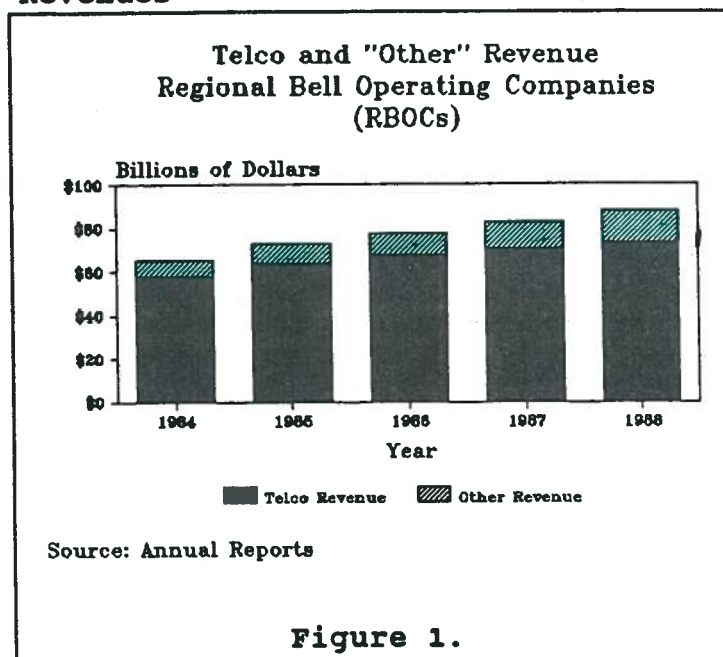
▶ Bell Atlantic Capital Corporation
 • Bell Atlantic Tricon Leasing Corporation
 o Tricontinental Leasing Corp.
 o Tricontinental Leasing of Puerto Rico, Inc.
 o BATCL - 1987 I. Inc.
 o BATCL - 1987 II. Inc.
 o BATCL - 1987 III. Inc.
 o Bell Atlantic Tricon Governmental Finance
 o Bell Atlantic Tricon Medical Finance Company
 o BATCL - 1989 I. Inc.
 o BATCL - 1989 II. Inc.
 o BATCL - 1989 III. Inc.
 • Bell Atlantic Systems Leasing International, Inc.
 o Bell Atlantic Financial Overseas Corp.
 Bell Atlantic Financial France
 Bell Atlantic Financial S.A.

(Continued)

Bell Atlantic Financial GMRH
 Bell Atlantic Financial (U.K.) LTD
 BAC Financial B.V.
 o D.S. Inc.
 o GCC FAR East Inc.
 o Shorrok, Inc.
 o New CII Computer, Inc.
 • Bell Atlantic Ventures XIII. Inc.
 • Bell Atlantic Vehicle Management
 o Bell Atlantic Vehicle Management
 • Bell Atlantic DATA 3 Corp.
 Bell Atlantic Investment Development Corp.
 ▶ Bell Atlantic Ventures, Inc.
 ▶ Bell Atlantic Business Suppliers Corp.
 ▶ Compushop Inc.
 • Time-Tronics Inc.
 ▶ Telecommunications Specialist Inc.
 ▶ Bell Atlantic Technical Ventures, Inc.
 ▶ Bell Atlantic Ventures XI., Inc.
 ▶ Bell Mobilfunk GmbH
 ▶ Technology Concepts Inc.
 ▶ Bell Atlantic Information Systems, Inc.
 ▶ Bell Atlantic Services Management, Inc.
 ▶ Bell Atlantic International
 • BAC International The Netherlands B.V.
 o Bell Atlantic Int'l Italia S.r.l.
 • B.A. International Europe S.A.
 ▶ Bell Atlantic Systems, Inc.
 ▶ Chesapeake Directory Sales Corp.
 ▶ Bell Atlantic Education Service, Inc.
 ▶ Bell Atlantic Directory Graphics, Inc.
 Bell Atlantic Financial Services Inc.
 Bell Atlantic Properties, Inc.
 ▶ SAP - Durham, Inc.
 ▶ SAP - Justin, Inc.
 ▶ SAP - 1760 Market Inc.
 ▶ SAP - 1310 North Court House Road, Inc.
 Bell Atlantic Rental Properties, Inc.
 Bell Atlantic Ventures III, Inc.
 Bell Atlantic Foreign Sales Corporation
 Bell Atlantic Capital Advisors, Inc.
 Bell Atlantic Distribution, Inc.

B. Growth in "Other" Revenues

Data are available from the Annual Reports on the telecommunications and "other" sources of revenue for each of the seven RBOCs. This information forms the basis for Figures 1 and 2 and is contained in Tables V.3 and V.4. Figure 1 illustrates visually the growth in telecommunications and "other" revenues between 1984 and 1988. Figure 2 then depicts the growth in the nontelecommunications' share of total revenues in the same years. Table V.3 shows, for each of the seven RBOCs, total revenues decomposed by source, telecommunications and "other." Table V.4, based on the information in Table V.3, shows the percentage of total revenues represented by the "other" category which is a proxy for nontelecommunications revenues. Both sets of data cover the period 1984-1988.



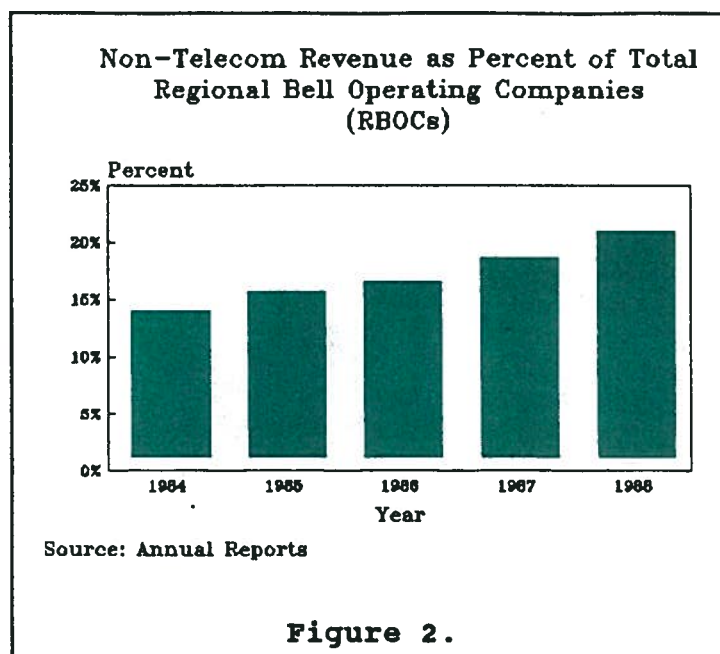
As is evident from both figures and tables, the most rapid growth in the RBOCs' revenues is attributable to the "other" sources.⁴⁰ For example, in the aggregate, the "other" revenues for all seven RBOCs nearly doubled between 1984 and 1988, from \$7.4 billion in 1984 to \$14.5 billion in 1988. In comparison, the revenues from telecommunications operations rose by 16 percent, from \$50.6 billion to \$58.7 billion, over the same period. Thus, as shown in Table V.4, the "other" share of revenue steadily increased from 12.8 percent in 1984 to 19.8 percent in 1988. This aggregate trend is replicated for each of the seven RBOCs, as is also shown in Tables V.3 and V.4.

⁴⁰ Unfortunately, the "other" category cannot be further disaggregated to differentiate between cellular and yellow pages advertising revenues, and the "other" non-telecommunications sources.

Table V.3
REVENUES
REGIONAL BELL OPERATING COMPANIES (RBOCs)
(\$ Millions)

		Years					
RBOCs		1984	1985	1986	1987	1988	Percentage Change
Ameritech							
	Telco	7,346	7,817	8,071	8,014	8,302	13.0
	Other	1,051	1,272	1,314	1,534	1,601	52.3
	Total	8,397	9,089	9,385	9,548	9,903	17.9
Bell Atlantic							
	Telco	7,068	7,711	8,271	8,412	8,421	19.1
	Other	1,028	1,420	1,784	2,335	2,459	139.2
	Total	8,096	9,131	10,055	10,747	10,880	34.4
BellSouth							
	Telco	8,442	9,164	9,568	9,902	9,506	12.6
	Other	1,231	1,549	1,773	2,182	3,155	156.3
	Total	9,673	10,713	11,341	12,084	12,661	30.9
NYNEX							
	Telco	8,524	9,107	9,827	10,079	10,329	21.2
	Other	1,050	1,206	1,514	2,005	2,332	122.1
	Total	9,574	10,313	11,341	12,084	12,661	32.2
Pacific Telesis							
	Telco	6,818	7,278	7,651	7,750	7,838	15.0
	Other	1,007	1,220	1,326	1,406	1,645	63.4
	Total	7,825	8,498	8,977	9,156	9,483	21.2
Southwestern Bell							
	Telco	5,988	6,583	6,838	6,902	6,942	15.9
	Other	1,203	1,342	1,064	1,101	1,511	25.6
	Total	7,191	7,925	7,902	8,003	8,453	17.5
US West							
	Telco	6,441	6,654	6,846	7,000	7,404	15.0
	Other	839	1,160	1,535	1,697	1,817	116.6
	Total	7,280	7,814	8,381	8,697	9,221	26.7
Combined RBOCs							
	Telco	50,627	54,314	57,072	58,059	58,742	16.0
	Other	7,409	9,169	10,310	12,260	14,520	96.0
	Total	58,036	63,483	67,382	70,319	73,262	26.2
Percentage Telco							
		87.2	85.6	84.7	82.6	80.2	-8.1
Percentage Other							
		12.8	14.4	15.3	17.4	19.8	55.2

Source: Annual Reports



**Table V.4
PERCENTAGE NON-TELECOM REVENUES
REGIONAL BELL OPERATING COMPANIES (RBOCs)
(Percentages)**

RBOCs	Years				
	1984	1985	1986	1987	1988
Ameritech	12.5	14.0	14.0	16.1	16.2
Bell Atlantic	12.7	15.6	17.7	21.7	22.6
BellSouth	12.7	14.5	15.6	18.1	24.9
NYNEX	11.0	11.7	13.3	16.6	18.4
Pacific Telesis	12.9	14.4	14.8	15.4	17.3
Southwestern Bell	16.7	16.9	13.5	13.8	17.9
US West	11.5	14.8	18.3	19.5	19.7
Total	12.8	14.4	15.3	17.4	19.8

Source: Annual Reports

C. Regulated Activities' Declining Share of Total Capital Expenditures

In the aggregate, the share of total capital expenditures devoted to telecommunications operations declined steadily between 1984 and 1988. This decline is illustrated in Figure 3 and the data are contained in Table V.5. In 1984, when the total RBOC capital expenditures were \$13.4 billion, telecommunications accounted for \$13.1 billion or 97.5 percent of the total. By 1988, the total capital expenditures had increased to \$15.5 billion, but the share directed to

telecommunications operations was down more than eight percentage points, to 89.2 percent. Thus, four years after divestiture, the RBOCs apparently were directing less of their total expenditures to their traditional telecommunications responsibilities.

Table V.5 also shows the rapid growth in capital expenditures on "other" activities. In 1984, "other" capital expenditures were \$333 million. By 1988, these expenditures had risen by 402 percent to \$1,673 million. The same growth patterns are shown in Table V.5 for each of the seven RBOCs.

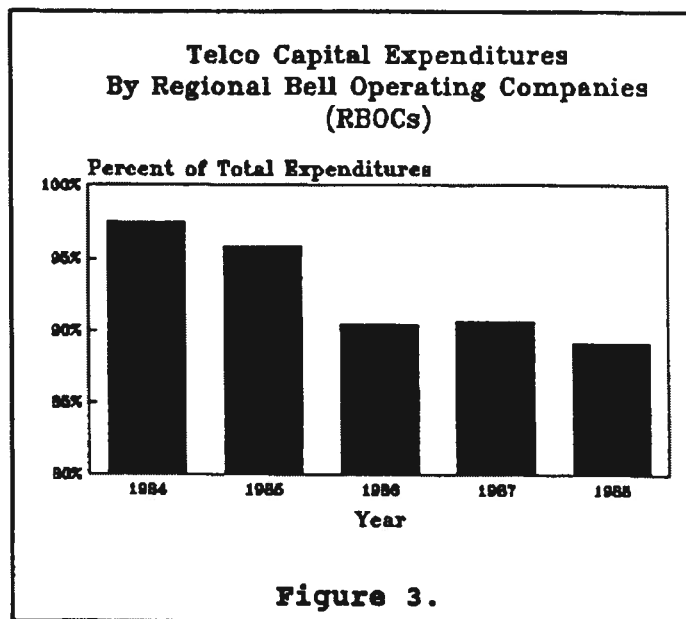


Figure 3.

Table V.5
CAPITAL EXPENDITURES
REGIONAL BELL OPERATING COMPANIES (RBOCs)
(\$ Millions)

RBOCs		Years					Percentage Change 1984-88
		1984	1985	1986	1987	1988	
Ameritech	Telco	1,686	1,916	2,006	1,878	1,811	7.4
	Other	61	75	70	78	84	37.7
	Total	1,747	1,991	2,076	1,956	1,895	8.5
Bell Atlantic	Telco	1,913	2,096	2,282	2,340	2,498	30.6
	Other	0	67	9	24	122	N.A.
	Total	1,913	2,163	2,291	2,364	2,620	37.0
Bell South	Telco	2,229	2,571	2,747	2,886	2,875	29.0
	Other	45	53	88	122	172	282.2
	Total	2,274	2,624	2,835	3,008	3,047	34.0
NYNEX	Telco	1,828	1,980	2,155	2,278	2,450	34.0
	Other	26	108	249	352	334	1184.6
	Total	1,854	2,088	2,404	2,630	2,784	50.2
Pacific Telesis	Telco	2,020	2,163	1,683	1,522	1,265	-37.4
	Other	21	94	420	506	325	1448.0
	Total	2,041	2,257	2,103	2,028	1,590	-22.1
Southwestern Bell	Telco	1,749	2,013	1,889	1,414	1,091	-37.6
	Other	55	77	81	70	131	138.0
	Total	1,804	2,090	1,970	1,484	1,222	-32.3
US West	Telco	1,649	1,916	1,670	1,618	1,789	8.5
	Other	125	173	612	290	505	304.0
	Total	1,774	2,089	2,282	1,908	2,294	29.3
Combined RBOCs	Telco	13,074	14,655	14,432	13,936	13,779	5.4
	Other	333	647	1,529	1,442	1,673	402.0
	Total	13,407	15,302	15,961	15,378	15,452	15.3
Percentage Telco		97.5	95.8	90.4	90.6	89.2	-8.6
Percentage Other		2.5	4.2	9.6	9.4	10.8	332.0

Source: Annual Reports

D. Conclusions

It appears from the empirical evidence on corporate reorganization, revenues, and capital expenditures that the RBOCs have been diversifying increasingly since divestiture into nonregulated markets. This trend means there is an even greater opportunity for and thus risk of cross-subsidization from the monopoly ratepayers to the nonregulated services. The risk of anticompetitive practices is also heightened, given the vast number of nonregulated markets in which the RBOCs now appear to be operating.

The relaxation of the line of business restrictions by Judge Greene in his reconsideration of the MFJ adds another source of risk. In particular, Judge Greene has allowed the RBOCs to provide those services necessary for the transmission of information services generated by others and to operate nontelecommunications businesses without judicial oversight.⁴¹ The services and infrastructure needed to transmit information are the video gateways. The primary technical function of the gateway is to increase the speed of the transmission rate of data through the network. Furthermore, due to the fact the RBOCs will provide gateways throughout their service territories, these services will reach customers sooner than if the provision of gateways were limited to alternative providers. Given these benefits, Judge Greene has allowed RBOCs to invest in facilities needed to provide gateways and to offer gateway services.⁴²

With respect to the nontelecommunications services, Judge Greene has removed the entry restrictions on RBOCs. In addition to not only having to obtain waivers for entry into new businesses, they also do not have to maintain the four conditions placed on past waivers.⁴³ These conditions were: "that the new competitive business be operated through a separate subsidiary; that the subsidiary obtain its own debt financing on its own credit, as distinguished from that of the Regional Company's telephone affiliate; that the total estimated net revenues for all the nontelecommunications activities engaged in by a Regional Company pursuant to waiver not exceed 10 percent of that company's total net revenues; and that the monitoring and visitorial provisions of section VI of the decree shall apply to that subsidiary."⁴⁴

⁴¹ U.S. v. Western Electric Company, Inc., et. al., 673 F. Supp. 525, 602-03 (D.D.C. 1987), aff'd in part, D.C. Cir., No. 87-5388, April 13, 1990.

⁴² Id. at 591, 592.

⁴³ Id. at 599.

⁴⁴ Id. at 598.

Finally, the integrated nature of the network within this broader context will make cross-subsidization more difficult to detect and monitor, even if the will on the part of the FCC is there. If the will is lacking, the task is virtually impossible.

VI. Problems with the Use of Fully Distributed Costing Methods

The FCC requires the use of FDC methods to divide the revenue requirement between the interstate and state jurisdictions and to divide costs between regulated and nonregulated services. This section describes four problems with the use of FDC methods:

- A. The FCC's FDC methods do not assign true economic costs to the nonregulated services.
- B. The FCC's FDC methods overallocate costs to regulated customers.
- C. The FCC's FDC requirements ignore nonbook transfers of valuable information and resources.
- D. The FCC's FDC methods underallocate the benefits of integration to consumers of regulated services.

Each of these arguments is discussed below in the following Subsections A through D.

A. The FCC's FDC Methods Do Not Assign True Economic Costs to the Nonregulated Services.

Economists frequently criticize FDC methods as not being consistent with "true economic costs," that is, the price the service will command in the marketplace. If transactions are internalized within the firm, then the cost allocated to a particular service can deviate from the economic value of the service.

The best way to illustrate this is through a case study. The analysis is presented in terms of the allocation of costs between the regulated and nonregulated activities of a local exchange carrier (LEC).

In reversing its earlier Computer Inquiry II requirement for separate subsidiaries, the FCC was responding explicitly to arguments advanced by the LECs that the separate subsidiary requirement for regulated and nonregulated activities imposed additional costs.⁴⁵ They also claimed that these costs could be

⁴⁵ Interestingly, the LECs' arguments for relief from the separate subsidiaries requirement in Computer Inquiry III did not extend to all services, most notably the highly profitable cellular radio service. In fact, several of the RBOC cellular radio providers, including Ameritech Mobile, and Bell Atlantic Mobile, argued specifically that "the results of this proceeding [Computer Inquiry III] should not apply to [the FCC's] policies and regulations governing cellular carriers,

avoided if the two sectors of their business were able to operate on an integrated basis. In this subsection, we shall focus on the effectiveness of one of the nonstructural safeguards, cost allocation, as a policy substitute for structural separation. The cost allocation requirement was envisioned by the FCC as the Computer Inquiry III means for accomplishing the Computer Inquiry II policy goals regarding cross-subsidization, predation, and other anticompetitive practices.

The argument that the costs of integration are lower than the costs associated with separate subsidiaries is expressed by economists as a matter of economies of scope. Accepting, for the moment, that such economies result from the integration of regulated and nonregulated activities, these economies must arise from the joint production of both types of services out of a common base of capital and other resources, that is, joint costs.⁴⁶ These joint costs, however, create and complicate the cost allocation problem. Virtually any type of allocation of joint costs is, to some extent, arbitrary, as there is no single "correct" allocation or solution. Unfortunately, the administration of the cost allocation process itself ultimately must rest with the LECs, organizations whose respective incentives are distinctly at odds with those of virtually all other stakeholders in the telecommunications policy process.

A dominant LEC engaged in both regulated ("above the line") and nonregulated ("below-the-line") business activities has a clear and unambiguous incentive to allocate as much of its joint costs as possible to regulated services, while assigning as much of its revenues as possible to nonregulated services. Assuming that such a tactic could pass regulatory scrutiny, it might be in the interest of a LEC to operate a nonregulated activity at a loss (from the total corporation perspective) as long as the revenues assigned "below-the-line" exceed the similarly assigned costs.

The possibility that such behavior might occur has been at the center of national telecommunications policy concerns for some time. It lay at the root of the 1949 federal antitrust suit against AT&T, and it was the basis for the 1956 Consent Decree in which AT&T and its subsidiaries were enjoined from participation in

particularly the structural separation requirements for BOC provision of cellular services." Amendment of Section 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry); and Policy and Rules Concerning Rates of Competitive Common Carrier Services and Facilities Authorizations Thereof, CC Docket No. 85-229, 60 RR 2d 627 n. 106 (1986).

⁴⁶ If no such joint production economies were present, then there would be no consequential benefit to organizational and resource integration.

virtually any nonregulated business.⁴⁷ Despite the limitations imposed in the 1956 Consent Decree, the same basic issues persisted into the 1970s and ultimately motivated the U.S. Department of Justice to initiate a new antitrust suit against AT&T. This time the focus was on practices involving or affecting competitors in the customer premises equipment (CPE) and interexchange services businesses, activities that the FCC only recently had opened up to competitive entry.⁴⁸ In view of the unambiguous economic incentives and the long history of company behavior which confirmed the worst fears of critics, the FCC's policy of permitting the LECs themselves to design and administer the "cost allocation" nonstructural safeguard is clearly to assign the "fox" to guard the "chicken coop."

To its credit, the FCC attempted to address this concern in an Order in CC Docket 86-111, in which it adopted the principle that the competitive, nonregulated activity should be responsible for the economic value of its share of a jointly used resource, unless a published tariff price existed for a given service.⁴⁹ In the case of a transfer of assets (as distinct from services), the nonregulated activity is required to pay the greater of the embedded cost or economic value. In theory, this approach has the effect of transferring all the benefits of joint production to the regulated activity, where those economic benefits can be used to offset the regulatory revenue requirement and thereby to reduce the cost and the price of regulated monopoly telecommunications services.

⁴⁷ In the Matter of Specialized Common Carrier Services, Report and Order, 29 F.C.C.2d 870 (1971); U.S. v. Western Electric Co. and the American Telephone and Telegraph Company, 1956 Trade Cas. (CCH) 68,246 (D.N.J. 1956). Under the 1956 Consent Decree, AT&T's manufacturing subsidiary, Western Electric, was generally prohibited from selling its products outside the Bell System. AT&T and its then operating company subsidiaries were prohibited from engaging in most nonregulated activities.

⁴⁸ In the Matter of the Use of the Carterfone Device in Message Toll Telephone Service, 13 F.C.C.2d 430 (1967), aff'd on recon., 14 F.C.C. 2d 571 (1968).

⁴⁹ See In the Matter of Separation of Costs of Regulated Telephone Service from Costs of Nonregulated Activities, CC Docket No. 86-111, Report and Order (Feb. 1987), 2 FCC Rcd 1298, aff'd on recon. 2 FCC Rcd 6283 (1987) (Joint Cost Order on Reconsideration) at paras. 285, 290-299 (1986); see also 47 CFR 32.27.

Although the principle may be appropriate, in practice it has been substantially eroded by the FCC,⁵⁰ and it largely has been ignored by the dominant LECs in designing their own cost allocation manuals (CAMs) and procedures. CAMs generally adopt relative use allocators for assigning costs of common resources between regulated and nonregulated activities, which the FCC sanctioned in its Order. Indeed, rather than transferring assets outright and being subject to the more restrictive asset transfer requirements, the LECs have elected instead merely to transfer the use of assets owned by the regulated entity to the nonregulated entity. By virtue of the relative use allocation method, the nonregulated activity is permitted to enjoy all the benefits of scale and scope from joint production. Under the relative use allocation method, the LECs are able to utilize plant acquired for a base level of regulated services when they incrementally enter nonregulated lines of business and thus they incur little or no start-up costs or large capital outlays.

The following example illustrates this phenomenon. Assume the following: (1) A regulated service costs \$100,000 to furnish; (2) a nonregulated service, on a stand-alone basis (that is, not utilizing resources common to the regulated services) costs \$30,000; (3) if these services are provided jointly, the total cost is \$110,000; and (4) the relative use allocators of the jointly used assets are 95 percent to the regulated activities and 5 percent to the nonregulated activities. With these assumptions, the incremental cost of production would be \$10,000 and the economies of scope would be \$20,000.

From this admittedly oversimplified example, we illustrate four different cost concepts and their implications for valuing jointly used plant.

- (1) The stand-alone cost of the nonregulated activity is \$30,000. Any assignment of less than \$30,000 to the nonregulated activity would fail to capture the incremental cost of production (\$10,000) plus all the economies of scope (\$20,000) for the benefit of the regulated services.

⁵⁰ In the absence of an explicit tariff price, the FCC rules allow carriers to use a price list or generally prevailing price in order to value transfers of services between affiliates. However, the rules do not require that the transfers of such services to unaffiliated entities at "list prices" be disclosed. Joint Cost Order on Reconsideration *supra* at para. 138; see also, Ameritech Operating Companies Permanent Cost Allocation Manual for the Separation of Regulated and Nonregulated Costs, Memorandum Opinion and Order, AAD 7-1668 (DA 87-1886), January 29, 1988, at para. 17.

- (2) The incremental cost of the nonregulated activity is \$10,000 [$\$110,000 - \$100,000$]. On the one hand, any assignment of cost to the nonregulated activity that falls below \$10,000 would result in an increase in costs to consumers of the regulated services due to the company's provision of the nonregulated activity. On the other hand, any allocation to the nonregulated activity in excess of \$10,000 makes consumers of regulated services better off financially because it reduces the revenue requirement supported by the regulated services.
- (3) The economies of scope resulting from the integration of the regulated and nonregulated activities is \$20,000 [$(\$100,000 + \$30,000) - \$110,000$]. Under the principle originally set forth by the FCC in CC Docket 86-111, but subsequently eroded (as discussed above), the regulatory revenue requirement would be reduced by this entire \$20,000 (from \$100,000 to \$80,000), such that all of the benefits of joint production would flow to regulated services.
- (4) Under the relative use approach, incorporated in the approved FDC accounting rules, the total cost of \$110,000 is allocated between the regulated and nonregulated on the basis of the 95/5 percentage of use distribution. Thus, \$104,500 would be allocated to the regulated activities and only \$5,500 would be allocated to the nonregulated activities

How can one determine the "economic value" to a competitive activity of its participation in a joint production process? The previous example demonstrates that assignment of costs to the nonregulated activity on the basis of economic value implies that, in a joint production situation, the nonregulated activity should be charged the stand-alone cost of producing the nonregulated product or service. Unfortunately, a review of the various RBOC CAMs suggests that, in practice, allocations are not being made in this manner. Rather, they are based upon assignment devices such as relative use⁵¹ or other proportional sharing methods that are simply incapable of capturing stand-alone costs.

As another example, in 1986, the FCC determined that LECs could furnish billing services to interexchange carriers and others

⁵¹ The concept of "relative use" allocates switching costs between long distance and local services based on the percentage of usage devoted to each. If the usage of the two services had similar impacts on switching costs, relative usage allocations would be equitable. In this instance, however, the differential impacts are large, such that relative use provides a subsidy to long distance service.

on a nonregulated basis.⁵² As a consequence, a cost allocation procedure is required to assign joint billing costs to regulated billing activities (those associated with basic local telephone services) and nonregulated billing activities. Under Part 64 of the FCC's Rules (which govern cost allocation procedures), aggregate billing costs are allocated between regulated and nonregulated services primarily on the basis of the relative number of lines appearing on a subscriber's bill associated with each category of service. Although this may be an acceptable surrogate for a more direct cost measurement in the case of interexchange services (inasmuch as this procedure was motivated in large part by the break-up of the Bell System and the removal of long distance service from the scope of BOC activities), it affords the LECs an extreme advantage in using their in-place billing capabilities in connection with their own nonregulated enhanced offerings. For the most part, the inclusion of such ancillary services (for example, videotex gateways) on a subscriber's regular monthly telephone bill will add only a handful of billing lines. By contrast, it is likely that the billing lines associated with regulated LEC services and other nonregulated interexchange carrier billing services overwhelmingly would dominate the total billing activity. Thus, if the costs of bill preparation, mailing, payment processing, and even the development of special billing software for nonregulated activities were in fact allocated between regulated and nonregulated services under Part 64, then virtually none of these costs would be charged to the nonregulated LEC activity.

Incredibly, despite these significant cost allocation advantages afforded the dominant LECs, there is no requirement that the prices charged by them to other entities, including those with whom they compete directly for billing services themselves, be based upon this relative use allocation. In fact, there is nothing to prevent the dominant LEC from pricing its billing services to competing suppliers at up to the full stand-alone cost they would have to incur if they did not elect to utilize the LEC's billing services.

By contrast, if a competing nonregulated firm were to bill on a direct, stand-alone basis, the provider obviously would have to incur the full costs of bill preparation and mailing in the absence of the ability to share costs with regulated services. Alternatively, the provider could avoid these stand-alone costs by utilizing standard credit card or other billing services. Because the LEC does not incur either of these costs in providing billing services to its own nonregulated affiliates, the LEC is in a uniquely advantageous position to compete in any nonregulated markets created by its local monopoly telephone service franchise

⁵² In the Matter of Detariffing of Billing and Collection Services, Report and Order, 102 F.C.C.2d 1150 (1986).

and not by virtue of its special management skill, knowledge, or technical prowess.

B. The FCC's FDC Methods Overallocate Costs to Regulated Customers.

FDC methods do not favor regulated customers because of the arbitrary use of "allocators" that are biased toward the transfer of costs to the regulated side of the business. The purpose of this section is to illustrate this process and the resulting adverse effect on regulated customers.

In March 1987, the state regulatory commission staffs in Michigan and Wisconsin prepared a report, Ameritech Corporate Headquarters Expense Allocations (Ameritech Report), for the National Association of Regulatory Commissioners' Subcommittee on Accounts. Based on data for 1985, this report provides dramatic evidence of the ability of the RBOCs to overallocate corporate headquarters expenses to regulated customers.

Ameritech allocated \$64,247,208, or 94.7 percent of its assigned corporate headquarters expenses to the regulated customers.⁵³ Only 5.3 percent, or \$3,587,332, was charged to the nonregulated subsidiaries. Thus, the allocated corporate headquarters expenses totalled \$67,857,540.

The bases for this allocation are identified in Table VI.1, which disaggregates the total allocated corporate headquarters expenses of \$67,857,540, by type of allocator. The four classification groups, each using a different allocator, are: (1) directly charged, (2) general formula, (3) equity formula, and (4) other.

⁵³ Total 1985 Ameritech corporate headquarter expenses were \$78,881,694. Of that total, \$67,857,539 was assigned or charged to Ameritech subsidiaries. The difference between total expenses and the assigned expenses, \$11,024,155, remained a charge against the corporate headquarters.

Table VI.1

AMERITECH CORPORATE HEADQUARTERS EXPENSE ALLOCATORS

<u>ALLOCATOR</u>	<u>\$</u>	<u>%</u>
General Formula	34,938,623	51.5
Equity Formula	25,670,143	37.8
Other	4,356,491	6.4
Directly Charged	2,892,281	4.3
TOTAL	67,857,540	100.0

Source: "Ameritech Corporate Headquarters Expense Allocations 1985," March 1987, p. 25.

The amount of expenses allocated on the basis of the general formula was \$34,938,622, or 51.5 percent of the total. The general formula allots corporate overhead expenses to each Ameritech subsidiary based on its relative share of total assets and operating expenses. Given that the Bell Operating Companies (BOCs) are large and well-established compared to the nonregulated subsidiaries, they are allocated the bulk of the corporate overhead expenses even though they may not actually be causing the bulk of the common operating expenditures. This problem is recognized in the Ameritech Report: "Using the allocators used by Ameritech may, therefore, not be the fairest to the regulated side. It does not seem proper to use the same methodology for allocation of joint expenses to, for example, Michigan Bell and Ameritech Publishing."⁵⁴

The amount of expenses allocated on the basis of the equity formula was \$25,670,143, or 37.8 percent of the total. The equity formula allots expenses to each Ameritech subsidiary based on its relative share of total equity. Given the fact that the nonregulated companies are relatively new compared to the BOCs and have not generated large amounts of retained earnings through long years of profitable operations, the equity share of each of the nonregulated subsidiaries is relatively small, yet they still might account for a larger share of the common costs, such as corporate expenses.

Table VI.2 shows the disaggregation of the corporate overhead expenses among the regulated subsidiaries. For example, according to Table VI.2, Illinois Bell is responsible for 30.9 percent of Ameritech's corporate overhead expenses that are allocated to monopoly ratepayers (\$19,861,331 divided by \$64,270,208). It is evident from Table VI.2 that the largest regulated operating companies are allocated the largest share of the corporate overhead expenses.

⁵⁴ Ameritech Report at 4.

Table VI.2

**ALLOCATION OF REGULATED CORPORATE HEADQUARTERS EXPENSES TO
AMERITECH SUBSIDIARIES**

ACTUAL AMOUNTS AND PERCENTAGES

<u>Ameritech Subsidiaries</u>	<u>Amounts (\$)</u>	<u>Percentages(%)</u>
Illinois	19,861,331	30.9
Michigan	16,961,571	26.4
Ohio	13,255,422	20.6
Wisconsin	7,159,556	11.1
Indiana	7,032,328	11.0
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Total	64,270,208	100.0

Source: "Ameritech Corporate Headquarters Expense Allocations
1985," March 1987, p. 23.

C. The FCC's FDC Requirements Ignore Nonbook Transfers of Valuable Information and Resources.

Even if the cost allocation manuals (CAMs) developed by the LECs were capable of identifying the stand-alone economic cost attributable to the competitive nonregulated activity, they still would capture only a small part of the resources potentially transferable from the regulated to the nonregulated parts of the LEC's business. Specifically, the CAMs do not in any material sense address nonbook transactions between regulated and nonregulated activities. These include, but are not be limited to, exchanges of information, reassignment of personnel, access to the formidable financial resources of the regulated utility, and access to the trademarks, reputation, organizational and physical ubiquity, goodwill, and other tangible and intangible resources of the regulated utility and its corporate parent. Consider, for example, just one of these areas, access to and exchange of information.

- (1) Customer Proprietary Network Information (CPNI). The FCC has adopted a blatantly asymmetric set of requirements with respect to the flow of customer information from the regulated utility to the nonregulated business activities of a LEC. CPNI includes, among other things, customer names and addresses, the nature and quantity of telephone services being utilized, the nature and pattern of usage (for example, monthly toll billings), and so forth. Specifically, a LEC may provide CPNI to its nonregulated business organization unless explicitly directed not to do so by the customer. By contrast, the LEC is not required (indeed, not even permitted) to provide corresponding CPNI to its nonregulated competitors without a specific request from the customer that it do so. Moreover, under the CC Docket 86-111 cost allocation requirements, there is no specific charge or financial transfer flowing from the nonregulated business to the regulated side of the LEC when CPNI is transferred. The exchange of CPNI occurs in a number of subtle ways. For example, when a new customer contacts a LEC business office to order basic residential exchange service, CPNI is created the moment that customer provides his/her name and address to the business office representative. The latter, acting in real time, then immediately can attempt to sell the same customer a nonregulated service (such as voice mail). The patent unfairness of this arrangement notwithstanding, nothing in the FCC's cost allocation rules would require any financial transfer or "payment" by the nonregulated side of the LEC's business for this information.
- (2) "Comparably Efficient" Interconnections (CEI). Under the FCC's CEI rules (which along with "Open Network

Architecture," or ONA, constitute the other "nonstructural safeguard" in the Computer Inquiry III theory of market organization), a dominant LEC is required to provide its enhanced services competitors with comparably efficient interconnections whenever and at the time that it effects interconnections with its own enhanced services activity. A detailed discussion of the numerous deficiencies in the CEI and ONA concepts is beyond the scope of this paper, but for our present purposes it is sufficient to observe that the CEI/ONA requirement does not go to the exchange of information between the regulated and nonregulated parts of the LEC prior to the introduction of the latter's enhanced service using an interconnection furnished by the former. Indeed, because of its unique ability to exchange information with the regulated LEC organization, the nonregulated entity enjoys a potentially significant head start for which it makes no payment or on-book cost allocation or transfer.

- (3) Coordination of network planning and resource deployment. The LEC's nonregulated activity benefits from an exchange of information with the regulated entity regarding the latter's construction and network upgrade plans. For example, in 1988, Pacific Bell filed tariffs covering a set of Basic Service Elements (BSEs) essential for the provision (by it or by a competing enhanced service provider) of voice mail and call answering type services. The BSEs were to be offered on a two-year trial basis and be limited to 30 central offices spread over four of Pacific's California LATAs.⁵⁵ Almost simultaneously, the Pacific Bell "enhanced service provider" (ESP) affiliate proposed a two-year market trial of its voice mail and call answering services in precisely the same 30 central offices.⁵⁶ Notwithstanding the potential competitive unfairness of limiting competitor activity to the same geographical areas that had been preselected by Pacific Bell for introduction of its own enhanced service, nothing in the FCC's cost allocation rules would impose any specific requirement that the Pacific Bell ESP pay or otherwise effect any financial transaction with

⁵⁵ California Public Utilities Commission Decision No. 88-11-026, In the Matter of the Application of Pacific Bell (U-1000-C) for Authority To Adopt A Provisional Tariff To Offer Six Basic Service Elements Through A Market Trial, November 9, 1988.

⁵⁶ California Public Utilities Commission Decision No. 88-11-027, In the Matter of the Application of Pacific Bell (U 1001 C) For Approval of Its Plan To Provide Enhanced Services, November 9, 1988.

the regulated LEC to reflect the value of the information and coordination functions transferred to it.

By limiting its attention to the allocation of costs that can be reflected on the LEC's books, the FCC may be missing the far more significant source of integration economies created by removal of the Computer Inquiry II separate subsidiary requirement. As will be shown in Section VII A., the total financial (on-book) savings resulting from integration is an estimated \$230 million, or approximately three-tenths of one percent of total RBOC revenues.⁵⁷ In the context of an enhanced services marketplace whose potential size has been put in the tens of billions of dollars, the on-book economies of scope that the LECs so far have identified seem minuscule; they pale in comparison with the magnitude of potential exchange of resources and information that is not capable of being measured or monitored by any nonstructural device that the FCC has created thus far.

D. The FCC's FDC Methods Underallocate the Benefits of Integration to Consumers of Regulated Services.

When an BOC is afforded the opportunity to engage in a nonregulated business activity on a fully integrated basis with its regulated services, it enjoys enormous opportunities to absorb most or perhaps even all the joint costs of both activities within the above-the-line regulatory revenue requirement. A case in point is the provision of nonregulated inside wire maintenance service. In 1986, the FCC preemptively deregulated the maintenance of inside wire,⁵⁸ thereby removing this previously bundled element of basic local exchange telephone service from the scope of services included within the (primarily state regulated) revenue requirement. In response, most BOCs offered their subscribers, on a nonregulated basis, the opportunity to purchase an inside wire

⁵⁷ In paragraph 16 of the Report and Order in CC Docket No. 86-79 released January 12, 1987, four RBOCs provided estimated data on the cost of separate subsidiaries for CPE. In the Matter of the Furnishing of Customer Premise Equipment by the Bell Operating Telephone Companies and the Independent Telephone Companies, Report and Order, CC Docket No. 86-79, 2 FCC Rcd 143, 145 (1987). Using the data from the two median companies, divided by the total revenues for these companies, results in an estimated cost for a separate subsidiary of three-tenths of one percent of total revenue. Applying this factor to the seven RBOCs produces an estimated additional cost in 1989 of \$230 million.

⁵⁸ Detariffing the Installation and Maintenance of Inside Wiring, CC Docket No. 79-105, 51 Fed. Reg. 8498 (1986).

maintenance contract at a price in the range of 50 cents to approximately \$2.00 per month.⁵⁹

The nonregulated service is sold through the regulated telephone companies' business offices, often during the very same customer contact in which basic telephone service is being ordered. The billing and collection of revenues for this nonregulated service is also fully integrated into the monthly billing activities for regulated services. Because no separate "inside wire maintenance subsidiary" is involved, however, the costs associated with these functions are allocated under the CAM, rather than being explicitly charged for as they would be under a separate subsidiary model or as they are when the entity providing the service using the BOC billing is an unaffiliated third party. Under the cost allocation process, the integrated nonregulated inside wire maintenance service bears a minuscule share of the aggregate cost of billing and collections; far less than it would under a separate subsidiary model, and certainly far less than would be paid by any competitor desiring, for example, to offer its own inside wire maintenance option using BOC billing.

The FCC's Joint Cost Orders and rules are not designed to attempt to replicate the type of "arm's-length" cost allocation associated with nonregulated inside wiring maintenance services. The FCC does not prescribe a cost allocation method. Rather, it expects only that the BOC will document, in general, the process it is using to make the cost allocation. The concept of replicating the allocation that would occur if a separate subsidiary or a third party were to offer a maintenance contract and use the BOC to bill charges for this service is not part of the FCC scheme. The allocation methods can be different for each BOC, and the carriers generally are free, after public comment, to make any changes in the allocation process they have been using.

Thus, the results of individual BOC cost allocation for nonregulated inside wiring maintenance or other services cannot be "bench-marked" to other BOCs. Indeed, the results obtained over time by a given BOC may not be comparable due to periodic changes in the CAM. Examination of the allocation processes with respect to this maintenance service summarized in the initial CAM for one

⁵⁹ The lower priced "inside wire maintenance service" generally provides only for the repair of faults specifically associated with the customer's inside wire and identified as such by the customer; the more expensive service usually includes fault identification by the telephone company and even the use of a "loaner" telephone set if the problem is determined to be in that area.

RBOC, Bell Atlantic, demonstrates two key points.⁶⁰ First, the

⁶⁰ For example, the revenues for nonregulated inside wire maintenance service are grouped in Account 5050, "Customer Premises Revenue," and are directly assigned using subaccounts in the revenue billing program. However, the actual subaccounts used are not identified in the Bell Atlantic CAM.

As another example, marketing and sales expenses are grouped into two Accounts: Account 6611, "Product Management Expenses," and Account 6612, "Product Sales Expenses." The allocation of expenses for "Product Management Expenses - Management Activities" (the first cost pool for Account 6611) is based on employee time and expense reporting, but, the FCC does not require employee reporting criteria to be specified in the CAM. Moreover, the allocation of expenses for "Product Management Expenses - Support and General Administrative" (the third cost pool for Account 6611) is based on the regulated/nonregulated split in the first pool. Similarly, the allocation of expenses for "Product Sales Expenses - Management Activities" and "Product Sales Expenses - Support and General Administrative" (the first and third cost pools for Account 6612) is based on the same unspecified time and expense reporting applicable to their counterparts in Account 6611. In addition, there is a fourth cost pool for Account 6612, "Product Sales Expenses - Residual," that is allocated based on the General Marketing Allocator (that is, the average split of costs not otherwise allocated or assigned). However, the actual size of the "residual" is not available from the CAM.

As a final example, Account 6623, "Customer Service Expenses" is comprised of eleven cost pools. This subaccount includes the costs associated with calling a service representative for new service, who then proceeds to try to sell the inside wiring maintenance contract. Six of the cost pools are associated with "Account Maintenance and Customer Billing Expense." Of these six, three involve allocations between regulated and nonregulated, while the other three involve only carrier support and are considered to be directly assigned to regulated services. The use of these six pools, as a set, automatically involves a higher allocation to regulated services than if the carrier-oriented pools were not used in the allocator. Moreover, the first three pools, where service representative activities relative to the selling of inside wiring maintenance contracts are most likely to be booked, are allocated between regulated and nonregulated based upon time and expense reporting, including, specifically, an annual "Customer Service Order Center" study, which involves a random review of employee tally sheets. This annual review apparently occurs after the fact, that is, it is not a

specific features of the cost allocation process are not described in the CAM and may not even be known until after the cost allocation has occurred. Second, the allocation techniques provide ample opportunity, if not a virtual guarantee, that the BOCs will allocate fewer billing, operations and other costs to the nonregulated inside wiring maintenance service than would occur under any sort of "arm's-length" process for an unaffiliated third party or a fully separated subsidiary.

supervised time and motion study that could directly observe whether the service representatives actually tally the time they spend discussing the inside wiring maintenance contracts with customers.

VII. Arguments in Favor of Separate Subsidiaries

The purpose of this section is to present and analyze the arguments supporting the use of separate subsidiaries instead of the fully distributed costing methods now espoused by the FCC. Six basic arguments are offered.

- A. Separate subsidiaries make it easier to detect any cross-subsidization which might occur through procurement practices.
- B. There is no evidence that separate subsidiaries are more costly than the use of FDC methods.
- C. Separate subsidiaries protect monopoly ratepayers from losses associated with the risk of failure.
- D. Separate subsidiaries facilitate the monitoring of intra-corporate transactions.
- E. Separate subsidiaries eliminate the need to develop accounting rules which prohibit the transfer of costs to ratepayers.
- F. Separate subsidiaries protect the general public from anticompetitive practices.

Each of these issues is discussed below in Subsections A through F.

A. Separate Subsidiaries Make It Easier to Detect Any Cross-Subsidization which Might Occur through Procurement Practices.

A major benefit of the division of regulated and nonregulated businesses into the separate subsidiaries structure is that it exposes the relationships among the components of the holding company. Absent this exposure, it is possible for one subsidiary to favor another over an independent vendor when purchasing a product or service, with a resulting increase in costs to monopoly ratepayers.

Preferential procurement policies were one issue in the antitrust suit brought against AT&T. In that litigation, Judge Greene concluded that the government had presented a strong but rebuttable case that AT&T had engaged in this practice.⁶¹

⁶¹ Numerous antitrust complaints have been filed since divestiture. While few of these cases have been litigated, their existence strongly suggests that anticompetitive practices are endemic and mandate separate subsidiaries. For example, American Sharecom, Inc. v. Southern Bell Telephone

Following divestiture, the RBOC NYNEX established a practice of favoring one of its subsidiaries, Materials Enterprises Company (MECO), over alternative vendors. MECO's responsibilities included removal of central office equipment and the purchase of new equipment. The favoritism shown MECO was based on the following reasons: "1) MECO had the necessary organization in place at divestiture, 2) no other experienced turnkey vendors were available, and 3) MECO had the required facilities and licenses to transport and handle hazardous materials."⁶² The staff of the New York State Department of Public Service was able to verify, however, that (1) MECO did not have any experience in these matters, (2) other vendors were available, and (3) the need to transport hazardous materials was a very small part of the jobs MECO was hired to perform.⁶³

New York Telephone, a subsidiary of NYNEX, then claimed that it hired MECO as an "agent" to handle its equipment removal program, but all contracts between the two specified MECO as a vendor, not an "agent." Furthermore, MECO did not act like an agent; it did not pass price information to New York Telephone and MECO's fees were not specified prior to any transactions.⁶⁴

The major New York Telephone initiative involving MECO was the central office removal effort involving 440 offices and equipment valued (at the time of divestiture) at \$1.8 billion.⁶⁵ Prior to the staff's audit of this removal effort, New York Telephone awarded 80 percent of the contracts to MECO.⁶⁶ A comparison of the costs of removal showed that MECO's costs were five times higher than those of other vendors for similar jobs. In fact, for the disposal of

and Telegraph Company (D.D.C. 87-CIV-1334) is a pending complaint that the RBOCs engaged in price fixing in applying federal access charges to resellers. In McCaw Personal Communications, Inc. v. Pacific Telesis Group, 645 F. Supp. 1166 (N.D. Cal. 1986), a provider of paging service claimed that an RBOC, if allowed to merge with another paging company, would engage in predatory pricing.

⁶² State of New York Department of Public Service, An Operational Audit Report on New York Telephone Company's Central Office Equipment Removal Effort (December 1989) p. 8.

⁶³ Ibid., p. 9.

⁶⁴ Ibid., p. 10.

⁶⁵ Ibid., p. 29.

⁶⁶ Ibid., p. 66.

scrap equipment, outside vendors submitted no cost bids because they could sell the scrap at a sizable profit.⁶⁷

Another example of preferential treatment recently emerged in testimony presented before the Idaho Public Utilities Commission in Case No. U-1002-67A. At issue was the reasonableness of the purchase by a GTE operating company of switches that were manufactured by GTE. Table VII.1 shows the gross profits earned by Automatic Electric, GTE's manufacturing subsidiary, on sales to GTE domestic telephone companies and on sales to all other companies. The gross profit margin for sales to GTE telephone companies was higher than the margin to other companies. GTE had to lower its margin in order to sell in the competitive market. GTE should have treated its captive customers as if they were purchasing through a competitive market. Maintaining separate subsidiaries exposes data such as shown in Table VII.1. It allows regulators to insist that captive customers receive the same low price as competitive customers.

⁶⁷ Ibid., p. 97.

Table VII.1

**EQUIPMENT SALES OF AUTOMATIC ELECTRIC
TO GTE DOMESTIC TELEPHONE COMPANIES
AND TO ALL OTHER CUSTOMERS, YEAR ENDED 1982**

<u>Category</u>	<u>GTE Domestic Tel. Cos.</u>		<u>All Other Customers</u>	
	<u>(000)</u>	<u>%</u>	<u>(000)</u>	<u>%</u>
Sales	\$632,065	100.0	\$234,284	100.0
Cost of Sales	\$503,682	79.6	\$201,162	85.8
Gross Profit	\$128,383	20.4	\$33,122	14.2

Source: GTE Corporation, 1982 Data on Manufacturing, Supply, Directory and Service Affiliates, page 105.⁶⁸

⁶⁸ Direct Testimony of Richard Gabel Before the Idaho Public Utilities Commission, In the Matter of the Application of GTE Northwest, Inc., For Authority To Increase Rates and Charges, Case No. U-1002-67A, pp. 6-17.

For the RBOCs, divestiture marked a new era in switch purchasing. They began buying significant numbers of digital switches from Northern Telecom as well as from AT&T. Preliminary evidence shows that the competition between Northern Telecom and AT&T has reduced the price for switches. New York Telephone's price indices for inside plant, central office equipment, and electronic switches rose sharply from 1977 to 1984. However, from 1984 to 1986 these prices fell 25 percent.⁶⁹

In order to highlight the differences in price movements for specific technologies, it is necessary to look at the components of the telephone plant indices. For Bell Atlantic, the digital central office equipment index decreased by 2 percent annually from 1984 to 1988, while the analog central office equipment index rose by 12.8 percent annually in the same period. This comparison shows that where there is competition, such as in the digital market, prices can decline. In the analog market, in which AT&T is a monopoly provider, prices can be increased without the fear of a significant loss of sales.

This review of recent price trends highlights the relationship between corporate organization and prices. When manufacturing companies and operating companies are linked, there is a tendency for equipment prices to rise, and the captive customers of the operating companies pay for these price increases. When manufacturing companies are separated from operating companies, the latter can negotiate with manufacturers to obtain lower prices.

If the RBOCs are allowed to manufacture switch equipment, the opportunity to increase prices to captive customers will arise again. Affiliate services subsidiaries such as MECO have been used as a mechanism to enlarge the profits of the holding company at the expense of the operating company. The exposure of the relationship between parent and operating affiliates, by the establishment of separate subsidiaries, can provide a spotlight that will inhibit the RBOCs from abusing their ownership of the operating companies. This review demonstrates that separate subsidiaries are a necessary but not sufficient regulatory mechanism to prohibit corporate abuses. Along with separate subsidiaries, it is also necessary to have the right to audit intracorporate transactions and to establish rules governing these transactions such as a competitive bidding requirement.

⁶⁹ Kenneth Flamm, "Technological Advance and Costs: Computers versus Communications," in Changing the Rules: Technological Change, International Competition and Regulation in Communications, editors Robert W. Crandall and Kenneth Flamm (Washington, D.C.: Brookings Institution, 1989), pp. 29-35.

B. There Is No Evidence that Separate Subsidiaries Are More Costly than the Use of FDC Methods.

Questions about the relative costs of separate subsidiaries and FDC methods are not new. In fact, the issue was addressed in great detail in Computer Inquiry II and Computer Inquiry III, among others.⁷⁰ Ironically, in Computer Inquiry II and BOC Separation proceedings,⁷¹ the FCC concluded that structural separations were less costly than FDC methods and were more effective than the FDC methods in detecting and deterring unlawful conduct. Yet, in Computer Inquiry III, examining virtually the same costs and benefits of separate subsidiaries and FDC methods, the FCC concluded just the opposite.

Theoretically, the costs of separate subsidiaries should be viewed on both a quantifiable and nonquantifiable basis. In fact, however, quantifiable evidence is lacking. For example, in Computer Inquiry III, the FCC requested comments on whether the structural separations rules for enhanced services were too costly. A review of those comments reveals no quantifiable evidence that separate subsidiaries are more costly than FDC methods in the provision of enhanced services.

In another example, the Protocol Waiver Decision,⁷² the FCC specifically asked for information on the potential cost savings that would result if the RBOCs were granted a waiver from the

⁷⁰ Amendment of Section 64.702 of the Commission's Rules and Regulations, Final Decisions, Docket No. 20828, 77 F.C.C.2d 384, modified on recon., 84 F.C.C.2d 50 (1980), further modified on recon., 88 F.C.C.2d 512 (1981), aff'd sub nom., Computer and Communications Indus. Assn. v. FCC, 693 F.C.C.2d 198 (D.C. Cir. 1982), cert. denied, 461 U.S. 938 (1983); Amendment of Section 64.702 of the Commission's Rules and Regulations, Report and Order, CC Docket No. 85-229; 104 F.C.C.2d 958 (1986), modified on recon., 2 FCC Rcd 30305 (1987), further recon. 3 FCC Rcd 1135 (1988) second further recon., 4 FCC Rcd 5927, appeals pending sub. nom., California v. FCC, No. 87-7230 (9th Cir.) (pet. for rev. filed May 28, 1987) and Illinois Bell Telephone Co. v. FCC, No. 88-1364 (D.C. Cir.) (pet. for rev. filed May 16, 1988).

⁷¹ In the Matter of Policy and Rules Concerning the Furnishing of Customer Premises Equipment, Enhanced Services and Cellular Communications Services by the Bell Operating Companies, Report and Order, CC Docket No. 83-115, 95 F.C.C.2d 1117 (December 30, 1983).

⁷² Petition For Waiver of Rules Filed By Pacific Bell et. al., 100 F.C.C.2d 1057 (March 26, 1985).

Computer Inquiry II rules to perform conversion from asynchronous protocols to standard X.25 packet-switched network protocols in facilities located in the central office. Some of the RBOCs did not provide cost support studies. At best, preliminary estimates of avoided costs were submitted. One BOC, Northwestern Bell Telephone Co., did not respond to most of the questions on this issue.

Moreover, a further investigation of the scant support showed that the cost studies were flawed. For example, the RBOCs appeared to have charged themselves net book value for interoffice circuits, and they charged their competitors a higher tariffed rate. On this issue, the FCC finally ruled as follows:

Clearly, the proposed treatment by the RBOCs of their inter-office circuits is unwarranted, and, as is discussed below, is inconsistent with the principles adopted in the Protocols Decision. There are no efficiencies in the BOC's proposed use of these circuits over the existing uses of them by others. The same circuits are to be used. All that has been proposed is disparate pricing: net book if they are used by the RBOCs, and higher tariffed rates if used for comparable purposes by others.⁷³

It is clear the alleged costs of separate subsidiaries are overstated. As further evidence of this point, it has been shown that the costs of separate subsidiaries account for a small proportion of revenues. For example, information on the cost of providing customer premises equipment (CPE) on a separated basis was offered by the RBOCs in CC Docket No. 86-79.⁷⁴ When this information is compared to the total company revenues for the same period, 1984, as obtained from Value Line Investment Survey, the cost of separate CPE subsidiaries is only approximately three-tenths of one percent of total revenues.⁷⁵

⁷³ Id. at para. 75.

⁷⁴ In the Matter of Furnishing of Customer Premises Equipment by the Bell Operating Telephone Companies and the Independent Telephone Companies, CC Docket 86-79, Report and Order (January 12, 1987).

⁷⁵ This cost of separate subsidiaries is also based on the assumption that the extra cost of a subsidiary will be the same if it provides one service or all of the nonregulated services. Moreover, given that the RBOCs had an incentive to err on the high side when estimating the costs of separate subsidiaries, it is reasonable to assert that the minuscule fraction of three-tenths of one percent may be biased upward.

These estimates are supported by the finding of the FCC in its Reconsideration Order in the BOC Separation proceedings. In that Order, the FCC concluded that the cost of establishing a separate subsidiary was minor in proportion to total operating company revenues. It further concluded that "although there may be cost savings from certain unseparated activities, the regional companies still have not in their petitions for reconsideration identified specific levels of cost for establishing separate organizations which they would not, in any event, incur if competitive offerings could be performed on an unseparated basis."⁷⁶ Also in the Reconsideration Order,⁷⁷ the FCC indicated that the RBOCs do not always oppose separate subsidiaries because some have volunteered to provide services through a separate subsidiary, for example, in petitions to the court for line of business waivers from the MFJ.

Potential cost savings have been alleged to support the abandonment of the separate subsidiaries requirements in Computer Inquiry II. For example, the industry has advanced two major cost rationales for integrating regulated and nonregulated activities within the same entity. One is that there would be substantial cost savings associated with the use of joint plant. The other major rationale is that the integration of regulated and nonregulated operations would result in lower total administrative costs. The use of FDC methods rather than separate subsidiaries was alleged in Computer Inquiry III to minimize costs by taking advantage of the joint production costs for switches and other network equipment.

Based on a review of the CEI plans filed by the RBOCs for nonregulated services, there is no evidence that substantial cost savings are associated with the use of joint plant because, for the most part, the RBOCs are not using telephone company switches to provide nonregulated services. Instead, the RBOCs are collocating nonregulated equipment in the central office and as a consequence are paying for a local loop at tariffed rates and for the cost of space in the building. The RBOC advantage also is derived from its unequal access to CPNI. Thus, the anticipated investment savings from the joint use of the network are not materializing, and a major advantage that regulators had been promised by the RBOCs in the use of accounting separations, the use of joint plant, is not being achieved.

⁷⁶ In the Matter of Policy and Rules Concerning the Furnishing of Customer Premises Equipment, Enhanced Services and Cellular Communications Services by the Bell Operating Companies, recon., CC Docket No. 83-115, (June 1, 1984), 49 Fed. Reg. 26056 (June 26, 1984), at para. 28.

⁷⁷ In the Matter of Procedures of Implementing the Detariffing of Customer Premises Equipment and Enhanced Service (Second Computer Inquiry), recon., 84 F.C.C.2d 5 (1985).

The second rationale for administrative cost savings also may not produce the gains alleged by the RBOCs. The cost of regulation to prevent cross-subsidization depends on the relationship between the regulated and nonregulated business. If separate subsidiaries interacting with the regulated business in an arm's-length manner are compared with the FDC approach, it is clear that the latter imposes substantial costs on the regulated activities which are not required if separate subsidiaries are used.

For example, to comply with Part 64 Rules, numerous functions must be carried out. Among them are (1) the ongoing training necessary to comply with the rules, (2) the record-keeping for personnel who are involved in both regulated and nonregulated areas, and (3) the auditing of the process by a CPA firm. Each has associated costs related to maintaining a system which includes both regulated and nonregulated activities.

To determine whether separate subsidiaries are more costly than the FDC methods, one must compare the costs associated with each. Unfortunately, cost data pertaining to compliance with the separations rules have never been made public and thus claims that separate subsidiaries are too costly have not been verified. To be sure, these claims must be overstated because they fail to adjust for the costs of the accounting process to comply with the CAMs adopted as a result of the Part 64 Order in CC Docket No. 86-111.

Moreover, the issue cannot be resolved by looking solely at the cost side. The benefits also must be examined. Many are noted in this paper, and in Computer Inquiry III, for example, the following virtues of separate subsidiaries were presented by proponents:

1. Separate subsidiaries have contributed to an unparalleled cornucopia of enhanced services now available to the American public in a robust, competitive market. (NATA Comments at 12; MCI Comments at 12.)
2. Separate subsidiaries have spawned innovation and ensured the integrity and transparency of the basic communications network. (ADAPSO Reply Comments at 28.)
3. Separate subsidiaries have ensured that all users are given nondiscriminatory access. (ADAPSO Reply Comments at 28.)
4. Separate subsidiaries are necessary to facilitate the transition to competitive markets. In so doing, a wider variety of services will be made available to consumers and at lower costs. If the structural separation burden on AT&T were eliminated, AT&T would be in a position to use its market power to thwart competition and limit its development. (ITT Comments at 20.)

5. The risks of the loss of benefits of competition in the long run, if separate subsidiaries were eliminated, outweighs any short run inefficiencies that might be associated with separate subsidiaries. (Comments by Cellular Communications, Inc. at 28.)

C. Separate Subsidiaries Protect the Monopoly Ratepayers from Losses Associated with the Risk of Failure.

Economic theory maintains that increased profitability is the reward for increased risk. Diversification generally is undertaken to increase profitability. Since increased profits redound to the shareholders, equity requires that, in the telephone industry, ratepayers must be protected from the associated risks of diversification.

A viable mechanism for protecting the ratepayer from the costs of risk exposure is the use of subsidiaries for the nonregulated business activities of a utility. The mechanism by which monopoly ratepayers are made vulnerable to losses is through the cost of capital. If nonutility activities become more profitable than utility activities, management has an incentive to direct financial resources away from the utility business. If nonutility activities become less profitable or lose money, financial resources may be lost or produce a lower overall company return on investment than would have occurred in their absence.

The increased competition for available internal funds increases the need for externally generated sources. When the utility seeks additional external funds from debt by pledging the full faith and credit of the utility, the risk of company default is increased.

Standard & Poor's Telecommunications Ratings Update, August 30, 1988, contains a method of evaluating risk and a view of diversification as follows:

The ratings profile of telephone holding companies and diversified utility operating companies is weaker than that of non-diversified telephone utilities....⁷⁸

....[S]ince utility operations generally have less exposure to business risk than non-utility businesses, diversification outside of core businesses tends to increase utility companies' business risks. The use of consolidated borrowing power to fund investment in non-utility operations tends to

⁷⁸ See Standard & Poor's Telecommunications Ratings Update, August 30, 1988, page 4.

increase consolidated financial risk, even if the diversified operations themselves are financed conservatively.⁷⁹ To the extent that the trend to diversify continues, business risk is likely to increase, potentially leading to lower credit ratings....⁸⁰ With diversification efforts continuing, impacts on holding and operating companies' ratings are more likely to be negative than positive.⁸¹

The diversification process places downward pressure on bond and credit ratings with associated higher costs of money. When the utility seeks additional external funds from the equity markets, buyers of new equity express their desire for increased rewards for risk through lower purchase prices of new shares, the counterpart of higher yields or returns on their investment.

Placing nonregulated activities in subsidiaries provides a buffer or safety valve between the interests of ratepayers and shareholders. Control then can be exercised over the transfer of resources, financial and otherwise, from utility to nonutility purposes. Each subsidiary can be required to maintain an independent capital structure. The debt of the subsidiary may be pledged only against the "full faith and credit" of the issuing subsidiary.

There is a real basis for concern about the diversification activities of the seven RBOCs. A review of their 1988 Annual Reports reveals that, on average, 19.5 percent of their revenues were from nonregulated activities. (See Table V.3.) In 1984, the corresponding figure was 12.8 percent. Therefore, there has been an increase of more than 7 percentage points since divestiture. Given industry activity in 1989, the increase is likely to be even higher.

D. Separate Subsidiaries Facilitate the Monitoring of Intra-Corporate Transactions.

Perhaps the most comprehensive analysis of the monitoring issue is found in a recent U.S. General Accounting Office report, Telephone Communications: Controlling Cross-Subsidy Between Regulated and Competitive Services, (October 1987) (hereafter GAO report). The study examined the ability of the FCC to "implement a new program of safeguards against cross-subsidy, especially its

⁷⁹ Ibid.

⁸⁰ Ibid., p. 5.

⁸¹ Ibid.

new procedures for allocating costs among regulated activities."⁸² The GAO report sharply criticized the FCC for its failure to control cross-subsidization through the use of its cost allocation methods. Among the numerous criticisms of the FCC approach, several are excerpted here:

FCC's actions in prescribing cost allocation standards and requiring cost manuals and annual independent audits are all essential steps of an oversight program to ensure that telephone rates are not subsidizing competitive ventures. FCC expects these measures to provide assurance to the public that its rules and procedures are being followed consistently and that cost allocations are documented and accurately presented.⁸³

However, the unavoidably subjective nature of the cost allocation process and FCC's "public interest" mandate require that it remain involved in overseeing the allocation process and ultimately deciding whether the companies' results are acceptable. FCC plans to audit company records periodically, but at existing staffing levels these audits will be infrequent.⁸⁴

The level of oversight FCC is prepared to provide will not, in GAO's opinion, provide telephone ratepayers or competitors positive assurance that FCC cost allocation rules and procedures are properly controlling cross-subsidy.⁸⁵

FCC's past cost allocation efforts have been difficult and time-consuming. Reasons for these difficulties include the lack of systematic cost allocation standards and procedures, and the inherent subjectivity, and thus arbitrary nature of the cost allocation process as applied to telephone services sharing common equipment. Economics and accounting both provide guidance on allocating costs, but do not prescribe one single "right" way. Consequently, disagreement is understandable among the affected industry and consumer interests, making it difficult for FCC to arrive at a consensus. In the past FCC justified its requirement for separate subsidiaries

⁸² GAO Report, p. 8.

⁸³ Ibid., p. 3.

⁸⁴ Ibid.

⁸⁵ Ibid.

by citing the "inherent difficulties" in allocating costs.⁸⁶

Based on our assessment of FCC's progress and plans to date, however, we believe FCC will not be able to provide positive assurance that carrier costs are being properly allocated and cross-subsidy is being controlled. Since FCC's new regulatory program requires more oversight than the structural separation approach, it is essential for public acceptance of the program that FCC be able to provide a high degree of assurance to ratepayers and carrier competitors that cross-subsidies are being properly controlled.⁸⁷

The basis on which FCC will routinely determine the cost allocations are properly preventing cross-subsidies is questionable. The absence of complaints or other indicators of problems may cause FCC to conclude that no problems exist, but as we discussed in chapter 3, these indicators may not be effective, at least initially. While FCC will certainly investigate major problems if they are brought to its attention, it is also important for FCC to routinely sample carrier books and records to assess compliance and also judge the CPAs work. We see FCC at present with only the ability to do infrequent reviews of carrier records, given available audit staff and travel funds. Further, FCC's fiscal year 1988 budget request proposed to eliminate three auditor positions.⁸⁸

Judge Greene, in his reconsideration of the MFJ Judgment restrictions, also raised questions regarding the ability of the FCC to control cross-subsidy and anticompetitive activities in light of its reduced resources. He is quoted as follows:

The FCC now has fewer resources with which to regulate telecommunications carriers than in the past, particularly in the difficult and complicated area of cost allocation that was a central issue in the trial and that is central to the issue of cross-subsidization today. Since the time of the entry of the decree, the FCC's budget and manpower have decreased significantly. In 1980, the FCC had an authorized ceiling of 2,103 employees; this had fallen by 1987 to 1,855 employees, and the Commission was apparently short by 120 employees of even that lower ceiling. According to former FCC Chairman

⁸⁶ Ibid., p. 3-4.

⁸⁷ Ibid., p. 46.

⁸⁸ Ibid., p. 47.

Fowler, this "severe reduction of our staffing level, if allowed to continue, will limit our ability to meet the demands of our ever increasing workload in a timely and responsive manner."⁸⁹

Judge Greene further argued, despite his decision to remove the line of business restrictions for nontelecommunications activities, that the separate subsidy requirement had been an effective means of preventing cross-subsidy.

To the extent that there has been any recent change in the regulatory picture itself, it has been to weaken the regulations governing telecommunications carriers, not to strengthen them. This is shown most dramatically by the FCC's repeal of the separate subsidiary requirement for Regional Company competitive enterprises--a requirement that it had theretofore regarded as its most effective regulatory tool.⁹⁰

....FCC officials themselves conceded that the Commission could not prescribe cost allocation standards for the Bell System, and when that body began formulating the rules that would apply after divestiture, it concluded that 'no measures short of structural separation' could prevent the Regional Companies from exploiting their monopoly power to gain unfair advantages in nonregulated markets.⁹¹

Prior to this decision, state commissions could rely on the federal courts to provide some oversight of these nontelecommunications activities to ensure that the public interest was being protected. However, Judge Greene's decision to remove the nontelecommunications line of business restrictions means state commissions can no longer rely on Judge Greene's oversight of the RBOCs and thus must provide this oversight themselves. This burden is further complicated by the fact that most states do not have affiliated interest legislation that permits them to carry out these investigations.

The FCC has several mechanisms for monitoring the application of the cost allocations procedures by telephone companies. These include (1) review and approval of CAMs, (2) procuring audits by independent firms, and (3) conducting its own audits. In addition, state commissions can audit the intrastate operations that could

⁸⁹ U.S. v. Western Electric Co., 673 F. Supp. 525, 569 (D.D.C. 1987).

⁹⁰ Id. at 569-570.

⁹¹ Id. at 570, n. 199.

involve possible cross-subsidies between regulated and nonregulated services.⁹²

According to the GAO report, the FCC's review of the CAMs has been fraught with difficulty. The GAO cites the following examples:

1. The reviews of the carriers' cost allocation plans are very time consuming.
2. In one case, the FCC never completed its "planned action."
3. Efforts to revise the Uniform System of Accounts have been delayed.
4. The manuals are not sufficiently detailed and provide considerable scope for judgment, arbitrariness, and controversy.⁹³

Reasons given for these problems were "the lack of systematic FCC cost allocation standards and procedures and the inherent subjectivity, and thus arbitrary nature of the cost allocation process as it is applied to telephone services sharing common equipment."⁹⁴

Enforcement by state commissions also is hindered by the public holding company organizational structure of the telephone industry. (As an example, see Chart V.1) In this era of competition and diversification, state regulators have had increasing difficulty in accessing the financial records of parent companies when reviewing the affiliate companies' records for ratemaking purposes.

⁹² For example, at the behest of the National Association of Regulatory Utility Commissioners, the California Public Utility Commission conducted an audit of Pacific Telesis. See A Report on Pacific Bell's Affiliated/Subsidiary Companies, Proceeding No. A.85-01-034 (June 3, 1986). The commission found several deficiencies, including the transfer or lending of employees from the regulated to the unregulated operations; the shifting of property at less than fair market value; and the existence of intangible benefits to the unregulated operations for which no compensation was made (for example, use of Pacific Bell's reputation). See also GAO report, pp. 23-24.

⁹³ See GAO report, p. 24.

⁹⁴ Ibid.

The Public Service Commission of the District of Columbia (D.C. PSC) has had difficulty obtaining information from Bell Atlantic concerning its affiliate transactions with C&P. As a result, in Formal Case No. 827, the last C&P telephone company rate case, the D.C. PSC disallowed certain expenses of C&P which were paid to Bell Atlantic. For example, in 1984, C&P paid \$13,158,000 to Bell Atlantic Management Services, Inc., for administrative, technical, and operations services. C&P paid \$21,181,000 to Bell Atlantic Corporate Services, Inc., for services such as treasury operations, investor relations, finance and tax planning, and pension and savings plan administration. C&P paid \$5,453,000 to Bell Communications Research, Inc. for technical services. There is a danger that such transactions are not "arm's-length," and therefore C&P may pay more for these services than it should, to the detriment of D.C. customers. C&P appealed the D.C. PSC's action in this matter, and the case was remanded to the D.C. PSC because it had not adequately supported the basis for its disallowance. Of course, the inability to obtain data from C&P had necessitated the broad disallowance.⁹⁵

Some states, such as Virginia, Maryland and Pennsylvania (three Bell Atlantic jurisdictions), have legislation to regulate the transactions of a public utility and its affiliates in order to obtain access to such information. Such information helps state commissions identify cross-subsidization problems before they occur. However, other states, such as Iowa, have passed affiliate interest legislation because of problems in this area.

Long ago the federal government recognized the need to control public utility holding companies and their affiliates in the electric and gas industry. As a result, the Public Utility Holding Company Act (PUHCA), as amended, was enacted to control the utility companies' investments in nonutility businesses. Congress found that these holding companies and their subsidiaries are affected with a national public interest because, among other things, "their activities extending over many States are not susceptible of effective control by any State and make difficult, if not impossible, effective State regulation of public utility companies."⁹⁶ Specifically, Congress found that the national public interest, the interest of investors, and the interest of consumers of electric energy and natural and manufactured gas are or may be adversely affected (1) when investors cannot obtain sufficient information to determine the financial position of the issuers, (2) when subsidiary public utility companies are subjected to excessive charges for services, equipment, and materials because of an absence of arm's-length dealings, (3) when contract charges

⁹⁵ Chesapeake and Potomac Telephone Company v. P.S.C., 514 A.2d 1159 (D.C. App. 1986).

⁹⁶ 15 USCS §79(a) (1935).

are allocated among subsidiaries in different states so as to create problems of regulation with which the states cannot deal with effectively, (4) when control of subsidiaries affects the accounting practices and rate, dividend, and other policies of the companies so as to complicate and obstruct state regulation, or (5) when the growth and extension of holding companies bear no relation to economy of management and operation or the integration and coordination of related operating properties.⁹⁷

The purpose of PUHCA was to curb abusive practices of public utility companies by bringing them under effective control and to provide effective regulation of the expanding business of transmitting and selling electric and gas power in interstate commerce. This was done by reducing the size and complexity of holding companies to a "single integrated public utility system and to such other businesses as are reasonably incidental or economically necessary or appropriate to the operations of such integrated public-utility system."⁹⁸

Telephone holding companies, including the RBOCs, are not covered by PUHCA, although the RBOCs create many of the same problems that PUHCA was designed to prevent. Therefore, PUHCA or a similar type of statute should be applied to the RBOCs.

E. Separate Subsidiaries Eliminate the Need to Develop Accounting Rules which Prohibit the Transfer of Costs to Ratepayers.

RBOCs now operate in both competitive and monopoly markets. Common plant and equipment provide services in both markets. Therefore, it is necessary to develop a set of accounting rules to allocate the cost of this plant among the services.

For the competitive services, the RBOCs have set prices utilizing their own incremental cost standard. Its application is illustrated below with a description of their CAPCOST computer program which is used to develop, among other things, the incremental costs of their competitive services.⁹⁹

The first step in deriving the prices of such "competitive" services as Centrex that use the LEC infrastructure is to develop an estimate of the "incremental investment cost." This is then converted into a "recurring annual cost" by applying various capital and expense charge factors using an "annual cost model" such CAPCOST. As discussed below, these costing methods generally

⁹⁷ 15 USCS §79(b) (1935).

⁹⁸ 15 USCS §79k(b)(1) (1935).

⁹⁹ Bellcore Release: CAPCOST Version 2.0, copyright 1986.

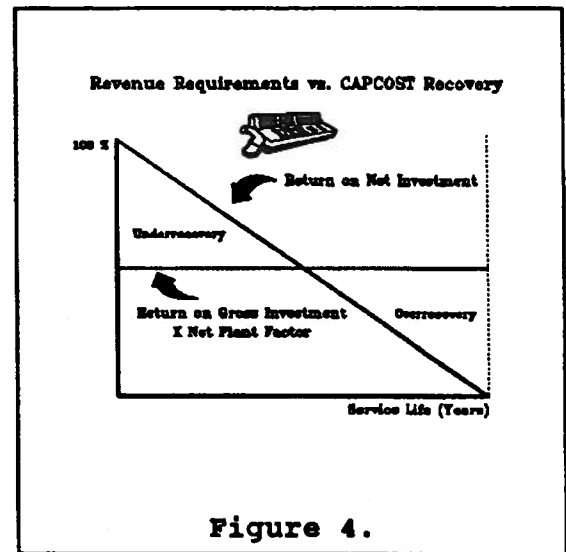
fail to develop recurring costs consistent with the FCC's "economic cost" objective. Moreover, they actually may produce a revenue requirements shortfall for the competitive services that will have to be offset by higher monopoly service rates.

Investment costs. While the definition of "incremental costs" has changed over time, the current LEC view is generally that the incremental cost of a competitive service utilizing the common network infrastructure should be based solely upon any additional investment outlays required to augment the baseline infrastructure to permit it to furnish the competitive service. Put another way, this "incremental cost" includes only those items that would not exist in the network but for the presence of the competitive service. Thus, excess capacity generally would be treated as costless (or nearly so) in estimating the incremental investment cost. In the case of Centrex-type services, the cost of embedded outside plant associated with individual Centrex station lines often is treated as a nonavoidable and hence zero-cost resource, even if new outside plant continues to be engineered and constructed in contemplation of continuing demand for this service. Interestingly, this definition can be applied selectively; there may be instances in which capacity costs are imputed for monopoly services even where excess capacity exists, while corresponding capacity costs are ignored for a competitive service.

Annual capital costs. Even if the investment cost could be determined accurately and fairly and assigned to the competitive service, the prevailing method for translating it into recurring annual capital-related carrying charges (that is, depreciation, cost of money, and associated income taxes) virtually assures a revenue requirement shortfall in the initial years of an asset's life that will have to be made up through higher rates for monopoly services. Specifically, the manner in which LECs apply "cost of money" factors to the gross investment in new plant has the effect of substantially understating the incremental revenue requirement effect of new plant acquisitions.

Recall that, for revenue requirement purposes, the telephone company is entitled to earn a return on its net investment. On the day that a new piece of equipment is acquired, however, the net investment and the gross investment are the same. Over the life of the asset, as depreciation charges are taken, the net investment is reduced. This process is illustrated graphically in Figure 4. In calculating the annual cost of money utilized in CAPCOST-type incremental unit cost studies, the LECs do not apply the cost of money carrying charge factor to the actual remaining net investment; instead they apply it to an average net investment calculated over the life of the asset. As a consequence, the actual net investment upon which the utility's aggregate revenue requirement is determined is greater in the first several years of the asset's life than the average net investment that is used in setting the price for the competitive service. The use of an

average net investment over the entire life of the asset permits the telephone company to develop a "levelized" annual carrying charge. If actual net investment were used, the cost of money would decrease each year as the remaining net investment is reduced by depreciation. As Figure 4 illustrates, the use of a levelized return on some measure of average depreciated investment has the effect of underrecovering the required return in the early years, while overrecovering the required return in later years.



Consideration of certain factors in developing the "average" net investment used as a basis for pricing can minimize the mismatch between the book revenue requirement effect of asset acquisition and cost recovery by means of service-specific prices. These factors include the time value of money and appropriate investment/business risks. Viewed in a more dynamic context, however, and assuming that the volume of "competitive" services continues to increase, the prospect of what may amount to a permanent revenue requirement shortfall cannot be ignored.

In principle, the shortfall in the early years of an asset's life will be offset by excessive returns in the later years. But if the total value of such assets increases continually, the excess earnings from previously acquired assets will not be sufficient to offset the immediate shortfall that results when new assets are added to the utility's rate base. The result is a permanent cross-subsidy flowing from monopoly consumers, who must make up for the shortfall, to the competitive activities that are furnished on an integrated basis.

F. Separate Subsidiaries Protect the General Public from Anticompetitive Practices.

It is argued that separate subsidiaries in telecommunications would protect the general public from anticompetitive practices in two ways. First, since RBOCs continue to have market power which creates competitive dangers, separate subsidiaries are necessary to minimize anticompetitive practices in these markets. Second, separate subsidiaries are the only effective means to minimize predatory pricing and other anticompetitive practices. These arguments are elaborated below.

1. Separate Subsidiaries are Necessary to Minimize Anticompetitive Practices because AT&T and the

**RBOCs Continue to Possess Substantial Market Power
which Creates Competitive Dangers.**

During the FCC's Computer Inquiry III proceeding, certain commenters argued that the imposition of separate subsidiaries was necessary to minimize anticompetitive practices in light of the substantial market power possessed by AT&T and the RBOCs. That power, according to these commenters, creates dangers to emerging competition which cannot be detected, let alone cured, without requiring separate corporate entities for the provision of enhanced services by AT&T and the RBOCs.¹⁰⁰ It was then argued that the FCC would be ill-advised, based on the market dynamics at that time, to reject the notion of separate subsidiaries.

For example, MCI Telecommunications Corporation (MCI) pointed to AT&T's 90 percent share of the interexchange market, which AT&T could utilize to leverage and exercise control over certain enhanced services markets utilizing AT&T's services.¹⁰¹ Furthermore, MCI claimed that removal of the separate subsidiary requirement would exacerbate the detection of improper cost shifts.¹⁰² In addition, MCI argued that the RBOCs had control of the facilities used to access the network, a bottleneck which the FCC itself had determined had been used anticompetitively by the RBOCs. To this end, MCI cited the FCC's Asynchronous/X.25 Order,¹⁰³ when the FCC "rejected as unlawfully discriminatory a proposal by the BOCs to assign to their own services at net book cost the same inter-office transmission channels which competing packet switched service vendors must purchase from the BOCs at higher, tariffed rates."¹⁰⁴

GTE Corporation shared MCI's concerns over AT&T's market power. Specifically, GTE argued that at the time the FCC was considering Computer Inquiry III, "neither divestiture nor any

¹⁰⁰ As previously discussed, the separate subsidiary requirement was imposed by the FCC in its Computer Inquiry II decision. See generally In the Matter of Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), Final Decision, 77 F.C.C.2d 384 (1980).

¹⁰¹ Comments of [MCI], CC Docket No. 85-229, filed November 13, 1985 (MCI Comments) at 17-18.

¹⁰² Id. at 18.

¹⁰³ In the Matter of Petition for Waiver of Section 64.702 of the Commission's Rules (Computer Inquiry II), ENF-84-15, et al., FCC 85-101, released March 26, 1985.

¹⁰⁴ MCI Comments at 20, citing Asynchronous/X.25 Order at paras. 5, 6.

other recent development [had] seriously reduced the market dominance of AT&T."¹⁰⁵ Moreover, "nascent competition [had] in no way deprived [AT&T] of its overwhelming market power in interexchange telecommunications, and the concomitant ability to engage in undetected cross-subsidization of its enhanced services."¹⁰⁶ Citing the FCC's own finding in Computer Inquiry II that AT&T, prior to divestiture, controlled bottleneck facilities at both the local and intercity transmission levels, GTE argued that, "despite divestiture, AT&T continues to control toll facilities and, by having that control, continues to dominate the interexchange marketplace for both switched and private line services."¹⁰⁷

GTE and MCI were not alone in their observations. The Independent Data Communications Manufacturers Association, Inc. (IDCMA), in its reply comments, noted the FCC's previous findings of AT&T's dominant position in the 800 services market, terrestrial private line service, and international MTS,¹⁰⁸ as well as IDCMA's contention that the RBOCs retained bottleneck control over local facilities and possessed "considerable market power."¹⁰⁹ To this end, IDCMA contended that there were a number of examples of the RBOCs' market power, including possession of exclusive local franchises of local exchange services; the inability of competitors to construct competing local networks due to the "staggering" financial investment involved; the need to utilize BOC services by virtually all users; the rate of return environment which permits recovery of costs, plus a return on investment; and the size of RBOC profits from regulated activities in comparison with their nonregulated operations, permitting the opportunity for "significant cross-subsidies."¹¹⁰ With regard to the provision of

¹⁰⁵ Comments of [GTE], CC Docket 85-229, filed November 13, 1985 (GTE Comments) at 8.

¹⁰⁶ Id. at 8-9.

¹⁰⁷ Id. at 9.

¹⁰⁸ See Reply Comments of [IDCMA], CC Docket No. 85-229, filed January 21, 1986 (IDCMA Reply Comments) at 4, citing Furnishing of Customer Premises Equipment and Enhanced Services by American Telephone & Telegraph Co., FCC 85-509, released September 30, 1985, at para. 75.

¹⁰⁹ Id. at 6.

¹¹⁰ Id. at 6-8. Cellular Communications, Inc. (CI) likewise noted its view that the FCC was correct in determining "that, even after divestiture, the BOCs would retain control over bottleneck network facilities, and continue to have the ability and incentive to use their monopoly power to cross-

CPE, IDCMA argued that the "BOCs' unique situation creates incentives and opportunities to advantage their unregulated operations through cross-subsidies, discriminatory provision of service, failure to make timely disclosures of network information, use of subscriber information in competitive marketing campaigns, and a variety of other techniques."¹¹¹

ITT Communications Services, Inc. shared similar concerns to IDCMA, but its focus was AT&T. Specifically, ITT argued that AT&T controls bottle-neck toll transmission facilities on which even its competitors must depend to offer services throughout the United States. Because of its continuing dominance of many of the markets in which it operates, AT&T plainly has a continuing ability to engage in cross-subsidization. And, were AT&T not subject to a structural separations requirement, it could integrate its common carrier activities with its activities in other non-communications markets.¹¹²

Moreover, ITT contended that AT&T's market dominance had not "materially diminished in the 5 years since the FCC's Computer II policies were adopted."¹¹³

ITT's concerns regarding AT&T's market power were mirrored, to some extent, by RCA Communications, Inc. RCA argued that AT&T's market power can be seen in, among others, its share of various markets, including interLATA toll, terrestrial private line, and international MTS; its size; its network facilities; its control over essential facilities; and its preferential interconnection arrangements.¹¹⁴ RCA argued, therefore, that all these factors enable AT&T "to manipulate the price and availability of essential interstate facilities."¹¹⁵ With regard to the RBOCs, RCA concluded that they, too, possess monopoly power in that "virtually all competitive telecommunications services, including all of the

subsidize any deregulated offering." Comments of [CI], CC Docket No. 85-229, filed November 13, 1985 (CI Comments), at 19-20.

¹¹¹ IDCMA Reply Comments at 20.

¹¹² Comments of [ITT], CC Docket No. 85-229, filed November 14, 1985 (ITT Comments), at 6.

¹¹³ Id. at 18.

¹¹⁴ Comments of [RCA], CC Docket 85-229, filed November 13, 1985 (RCA Comments) at 20-23.

¹¹⁵ Id. at 24.

non-video services provided by [RCA], must obtain access to their customers by way of the BOCs' local networks."¹¹⁶

2. Separate Subsidiaries Are the Only Effective Means to Minimize Anticompetitive Practices.

Certain commenters in Computer Inquiry III argued before the FCC that separate subsidiaries are the only effective means of minimizing anticompetitive practices. Commenters cited certain benefits associated with separate subsidiaries, some of which had been noted previously by the FCC itself.¹¹⁷ For example, RCA saw three principal benefits associated with the separate subsidiary requirement:

- (1) the elimination of cross-subsidies that are otherwise likely to occur as a result of a firm's decision to misallocate joint R&D [research and development], manufacturing, marketing and administrative costs to various lines of business;
- (2) protection against discriminatory pricing and interconnection practices by requiring that a carrier maintain an arm's-length business relationship with the subsidiary and offer communications services to the subsidiary only in accordance with general tariffs; and

¹¹⁶ Id. at 28.

¹¹⁷ Consistent with this notion, Cellular Communications, Inc., in summarizing its view of the FCC's Computer Inquiry II decision imposing structural separations, stated that:

[t]he [FCC] recognized that structural separation did not guarantee a competitive market, because it did not change the incentives of a dominant firm to engage in anticompetitive behavior. Instead, by highlighting transactions between regulated and unregulated operations and reducing the extent of joint and common costs, the requirement would make anticompetitive activities more easily detectable and thus more easily remedied. The [FCC] stated that it expected the benefits of the separate subsidiary requirement in reducing these harms to be "substantial."

CI Comments at 18-19 (footnotes omitted).

- (3) avoiding the need for detailed Commission regulation of the subsidiary's day-to-day business activities.¹¹⁸

In response to the claim that separate subsidiaries are too costly, IDCMA made one additional argument for both rejecting that notion and retaining separate subsidiaries. According to IDCMA, a final advantage of separate subsidiaries which should not be overlooked is that they limit the extent of regulatory intrusion into unregulated markets by reducing the need for regulatory oversight of cost allocations between regulated and unregulated activities. Both the [FCC] and state regulatory authorities have acknowledged that this benefit figured prominently in their decisions to impose separate subsidiary requirements on telephone companies.¹¹⁹

Finally, with respect to the argument that nonstructural safeguards (for example, reliance upon cost accounting safeguards) are just as effective as structural separations, ITT noted: (1) the cost accounting safeguards require great resources to implement and police, resources that the FCC may not have;¹²⁰ and (2) since accounting is not an exact science, many decisions are left to "unauditable judgments."¹²¹ Moreover, according to MCI, "existing federal accounting rules are far less exacting than in

¹¹⁸ RCA Comments at 16. The staff of the Missouri Public Service Commission and CI also noted the ability to ensure against discriminatory interconnection practices by the use of separate subsidiaries. See Comments of Missouri Public Service Commission Staff in Response to the FCC's Notice of Proposed Rulemaking Regarding the Revision of the Computer Inquiry II Rules, CC Docket No. 85-229, filed November 13, 1985, at 20 (separate subsidiaries were "used as a tool to ensure that dominant carriers did not leverage their monopoly power in the competitive markets by denying competitors access to the local exchange network or by having monopoly ratepayers bear the costs of competitive ventures."); see also *id.* at 23 (".... the establishment of a separate subsidiary reduces, and may even prevent, cross-subsidizing and discriminatory interconnections."); CI Comments at 25 ("The structural separation required by the Second Inquiry [Computer Inquiry II] was designed in part to require dominant carriers to offer equal interconnection arrangements to competing vendors.")

¹¹⁹ IDCMA Reply Comments at 22-23 (footnote omitted).

¹²⁰ ITT Comments at 9, 13.

¹²¹ *Id.* at 12.

the past and they provide little protection against misallocation and other improper pricing schemes."¹²²

¹²² MCI Comments at 43.

VIII. Refutation of Arguments Against Separate Subsidiaries

As the history of Computer Inquiry III shows, a number of allegations have been made against the use of separate subsidiaries. In this section, many of these will be refuted. A list of the arguments, in the affirmative, is provided below:

- A. Separate subsidiaries have facilitated telephone company diversification.
- B. The decision on how far into the vertical integration to extend the separate subsidiary is not an insurmountable barrier.
- C. Separate subsidiaries are not unworkable because of the nature of the technology.
- D. Separate subsidiaries do not inhibit the introduction of new services.
- E. Separate subsidiaries do not impede competition in certain markets.
- F. Separate subsidiaries do not cause consumer disruptions.

Each of these issues can be found below in Subsections A through F.

A. Separate Subsidiaries Have Facilitated Telephone Company Diversification.

Although Computer Inquiry III permits dominant LECs to substitute nonstructural safeguards for the former separate subsidiary requirement, it does not mandate that this be done or that it be done by a given LEC for all nonregulated services. As a result, the LEC has a strong economic incentive to select whichever of the two methods, separate subsidiary or nonstructural safeguards, happens to work to its economic advantage in each instance. Here are some examples.

Cellular. Under the FCC's Cellular Radio decision in 1982,¹²³ half the available frequencies were set aside for the indigenous local exchange carriers either on an exclusive grant basis or, if more than one company were involved in a given market area, on a readily achievable settlement basis. All of the larger LECs established separate cellular subsidiaries and flow none of

¹²³ In the Matter of Amendment of Part 2 and 22 of the Commission's Rules Relative to Cellular Communications Systems, Report and Order, 86 F.C.C.2d 469 (1981), aff'd on recon. 89 F.C.C.2d 58 (1982).

the earnings or appreciation in market value back to their regulated services, upon whose very existence the exclusive grant of the cellular franchise was directly predicated. Although few of the "wireline" franchises have been traded in the marketplace, there has been an extremely active market in those which are not wireline, and a significant number of such transactions have involved the parent corporations or cellular affiliates of the major LECs. Indeed, using the most recent transaction price as an indicator,¹²⁴ the combined market value of all the wireline cellular franchises (for which the LECs paid nothing at all) probably exceeds \$30 billion nationally. While this windfall gain in value is clearly an integral part of the LEC shareholders' return on investment, it has yet to be recognized as such for regulatory purposes. Thus, no benefits of the LECs' cellular activities have been realized by consumers of regulated services.

Yellow Pages. Originally, the MFJ contemplated that the Yellow Pages business would be retained by AT&T after divestiture. The RBOCs argued successfully before Judge Greene that revenues from Yellow Pages were required by the RBOCs to help subsidize basic telephone service and keep local rates low.¹²⁵ Having prevailed on their retention of the Yellow Pages business, six of the seven RBOCs (all but Bell Atlantic) immediately proceeded to create separate "Directory Publishing Agreements" between the LEC and the parent RBOC's directory publishing affiliate. The main effect was to divert a substantial portion of the growth in Yellow Pages revenues away from subsidizing basic services and toward below-the-line earnings for RBOC shareholders.

It is no coincidence that the specific business areas of greatest interest to the LECs for structural integration are those involving high start-up costs and possibly considerable risks. By this means, and by taking maximum advantage of the economic incentives and cost misallocation opportunities available to them, the LECs effectively can force consumers of regulated services to sustain much of the cost and risk attendant to the LECs' ultimate entry into future enhanced services markets. Moreover, assuming that some of these specific ventures prove profitable, there is no assurance or requirement, in the FCC's Computer Inquiry III rules, that the integrated status of regulated and nonregulated services be maintained. Indeed, it is likely that once the basic business has been firmly established and start-up costs have been fully

¹²⁴ McCaw Cellular agreed to pay \$1.9 billion for Metromedia's 50% interest in the New York/Northern New Jersey nonwireline cellular franchise. See "New York Acquisition," by McCaw, New York Times (October 4, 1989), p. D4.

¹²⁵ U.S. v. AT&T, 552 F. Supp. 131 (D.D.D., 1982), aff'd sub nom., Maryland v. U.S., 460 U.S. 1007 (1983); see also MFJ, section VIII B.

absorbed with the regulated entity, the LECs will seek to transfer the now profitable activity into their nonregulated separate subsidiaries. This "heads I win, tails you lose" policy benefits the dominant LECs. Moreover, it fails to provide any benefit to, and actually may pose a burden on, consumers of regulated services.

B. The Decision On How Far into the Vertical Integration to Extend the Separate Subsidiary Is Not an Insurmountable Barrier.

A major concern associated with using structural safeguards is how to determine at what level within the corporation the subsidiaries be allowed to share resources. If the level is too high, then for all practical purposes the same structural safeguard is the same as divestiture. If the level is too low, then the structural safeguard is ineffective.

Although it is clear that the solution cannot be determined with precision at the outset of any program, the important issue is not the level of the structural separation, but the ability to expose transactions between the separate organizations and to allocate the costs of resources used by more than one subsidiary. The experience of the Securities and Exchange Commission (SEC) in handling its mandate to supervise public utility holding companies provides an historical example. The SEC established a set of rules that (1) limited the transaction price for goods and services between subsidiaries to the cost of the goods or services, (2) specified how the cost of the good should be determined, and (3) required the holding companies to provide the regulatory authority with the information needed to insure that the regulatory mandate was followed. Rules to govern the relationship between telephone subsidiaries can be established in a similar fashion through joint federal and state negotiations.¹²⁶

C. Separate Subsidiaries Are Not Unworkable because of the Nature of the Technology.

Separate subsidiaries as a regulatory tool have been criticized for technical inefficiency. It is argued that telephone companies should be allowed to offer "information services for which it is most economical to use the central office switch" and that "it is inefficient to allow 'network intelligence' to migrate to CPE when central office technologies allow more efficient service provision."¹²⁷ This argument is based on the alleged

¹²⁶ 17 CFR 250.80-250.95.

¹²⁷ James C. Bonbright, Albert L. Danielsen, David R. Kamerschen, Principles of Public Utility Rates (Arlington: Public Utilities Reports, Inc., 1988), p. 621.

efficiencies of scale and scope which may be achieved for some services through central office rather than dispersed provisioning.

Of course, virtually all information services can be provided efficiently by the telephone company on its central office switching systems, by other providers, or by customer premises equipment. Nevertheless, some services can be provided more efficiently on telephone company switches. Examples are the provisioning of calling information used in setting up services such as WATS-like services and caller identification services. To concede this, however, is not to agree that all services which utilize basic office functions only can be provided efficiently on the central office switch. In the example cited here, it is the database which only can be provided by the BOC's switch. The services built on this information can be provided by anyone, including separate subsidiaries of the telephone company.

For many services, perhaps most, the nature of the technology is often not the primary consideration. Rather, it is how a particular service will be provided using the varied technological choices. Often there is more than one way of providing a service, central office provisioning being only one. For example, call forwarding can be implemented using CPE or the central office switch.

Sometimes a comparison is made between the costs of implementing an enhanced or information service by the telephone company and by separate subsidiaries or unrelated firms. In the real world, this comparison is not useful because different providers are not constrained to the same technology, and often have a number of practical choices. "There's more than one way to skin the cat" is very applicable to information services.

The argument that the nature of the technology makes separate subsidiaries unworkable must be made, if it can be, on a service by service basis. Separate subsidiaries as a regulatory tool should not be excluded solely for technological reasons.

D. Separate Subsidiaries Do Not Inhibit the Introduction of New Services.

Whether separate subsidiaries inhibit the introduction of new services by the RBOCs is open to question. Separate subsidiaries, while incurring some administrative costs, have the same access to network resources as do other independent providers of the service under either a CEI or ONA regulatory regime. The argument is made that the provision of information and enhanced services by alternative providers raises costs and inhibits the introduction of new services.

The history of separate subsidiary requirements does not lend strong support to the proposition that separate subsidiaries

inhibit the introduction of new technology. It is simplistic to tie the rate of innovation to the recision of structural conditions. Even when unconstrained by structural requirements, the BOCs have not always responded well to customers' needs for enhanced services. For example, in the New York Public Service Commission Bypass Proceeding (Case No. 28710), numerous users criticized New York Telephone for poor maintenance and lagging technology. This was affirmed by the Commission's decisions in the case.¹²⁸

Under the old Computer Inquiry II rules, most LECs were not subject to structural separation requirements for enhanced services. Some did quite well in introducing new offerings, and some did not. The lack of success of some large LECs may have been due to a number of reasons, including insufficient resources, lack of technical ability, insufficient customer demand, or inattention by company management and regulators. It is clear, however, that structural conditions are only one factor affecting innovation.

History also offers examples of structural separations that very effectively increased the rate of technical innovation in communications compared to what likely would have been achieved otherwise. COMSAT was created as an entity separate from then-existing international carriers, and few would argue that COMSAT has not been successful in developing new telecommunications services.

The lesson of history is that structural separations may have had a positive effect on service introduction. It is not at all clear that structural separations have had or will have any negative effect on the rate of innovation in enhanced services.

E. Separate Subsidiaries Do Not Impede Competition in Certain Markets.

Structural separations requirements did much to increase technological innovation and competition in the customer premises equipment (CPE) market in the last decade. Between 1980 and 1985, competition in the CPE market flourished to the point of triggering an industry shakeout in cellular phones and private branch exchanges.¹²⁹ The imposition of structural separations on

¹²⁸ Recommended Decision of Administrative Law Judge Thomas Redmond Matias, pp. 71-73, 121; State of New York Public Service Commission, Opinion and Order Concerning Bypass, Case No. 28710, Opinion No. 85-16, pp. 40-52, "Proceeding on Motion of the Commission as to the Provision of Telephone Services that Bypass Local Exchange or Toll Networks."

¹²⁹ "Cellular Phones: The Big Payoffs are Still on Hold," New York Times, June 23, 1985, p. F7.

dominant local carriers was also very successful in permitting competition to develop in enhanced services markets during this period.

Under the mandate of the Computer Inquiry II decision, the RBOCs and AT&T could provide enhanced services only through a fully separated subsidiary.¹³⁰ This safeguard allowed competition to develop in those markets. Value-added competitors such as Telenet, ITT, and GTE provided services ranging from electronic mail and packet switching to computer processing and protocol conversion.

F. Separate Subsidiaries Do Not Cause Consumer Disruptions.

An argument commonly made by opponents of separate subsidiaries is that they cause consumer disruptions. Consumers, we are told, do not like to purchase different components of what they perceive are the same fundamental service from different vendors. Similarly, consumers do not like worrying about which vendor to call regarding a maintenance problem with their service. There appears to be a general predisposition, at least among residential consumers, to call the telephone company (and not an alternative repair company) if something is wrong with their telephone service, whether the problem is with their access line, telephone set, or with wiring.

The conventional wisdom is that the separation of the telephone companies into smaller subsidiaries as a way to prevent anticompetitive conduct is undesirable to consumers. While this may be the case, it ignores the true source of consumer aggravation. The true source is the deregulation of the competitive service, in particular the deregulation of telephone installation and maintenance services. Deregulation and the concomitant development of competitive market conditions are responsible for the fundamental changes in the way services are delivered to customers. The creation of separate subsidiaries is merely one method of implementing deregulation so that improper cross-subsidization of the competitive service and/or anticompetitive conduct cannot occur.

Once competitive conditions develop in a particular market, and once the policymaker responds by deregulating the market (presumably to give the RBOCs and small competitor(s) a "level

¹³⁰ Second Computer Inquiry, Final Decision, 77 F.C.C.2d 384 (1980), Final Decision, modified on recon., 84 F.C.C.2d 50 (1980), Reconsideration Order, further modified on recon., 88 F.C.C.2d 572 (1981), Further Reconsideration Order, aff'd sub nom; Computer and Communications Industry Association v. FCC, 693 F.2d 198 (D.C. Cir. 1982), cert. denied, 461 U.S. 938 (1983), aff'd on second recon., F.C.C. 84-190 (released May 4, 1984).

playing field"), then changes in service delivery to end users are inevitable. Indeed, these changes are necessary and desirable if customers are to realize the potential benefits of the new market conditions. Customers will face more choices as services become increasingly unbundled and deaveraged in terms of price, quality, and other attributes. It is hoped that vendors will become more flexible and responsive to customer needs and offer innovative services and/or service options.

It is not surprising that many customers do not welcome the additional choices thrust upon them. Particularly for the residential or small business customer, the additional responsibility can be aggravating or burdensome. Someone who simply wants a telephone may be overwhelmed by the almost unlimited array of manufacturers, styles and services. Some may even look fondly at the days when there were no choices but to lease a standard black rotary dial Western Electric telephone from the BOCs.

Any irritation on the part of consumers must be considered a necessary accompaniment to deregulation and the opening up of this market to competitive forces. That already has occurred, and there is no turning back. It is a mistake, however, to attribute possible customer aggravation to the method of implementing the deregulation, such as the creation of separate subsidiaries. The real cause of customer confusion and aggravation is deregulation, the true source of the fundamental changes occurring in the marketplace and thrust upon all customers, willing and unwilling alike.

IX. Implementation of Separate Subsidiaries

The mandate to create separate subsidiaries must be accompanied by rules establishing the boundaries of operation. The governing rules should be:

- A. The maintenance of a separate capital structure.
- B. The FCC and the state commissions must have the right to review affiliate interest transactions.
- C. The FCC and the state commissions must have the right to establish rules governing affiliate transactions.
- D. The subsidiaries must share only a chief executive officer and a limited number of directors.
- E. RBOCs must not be allowed to merge with or acquire companies which have a market share of 5 percent or more, or several companies which have a combined market share of 10 percent or more.
- F. The BOCs must be prohibited from lending money or assets to or purchasing the debt instruments of the other subsidiaries of the holding company.

Each of these rules is discussed below in Subsections A through F.

A. The Maintenance of a Separate Capital Structure.

Maintaining separate capital structures means that each subsidiary must raise its own funds in capital markets. These funds will consist of both debt and equity issues.

Three reasons favor a separate capital structure: (1) separate the responsibility for the debt of a subsidiary; (2) protect the investment of the utility company from failures of other subsidiaries of the holding company; and (3) insure that another party, namely minority shareholders, will have a stake in oversight of the subsidiaries.

If the holding company were allowed to consolidate its capital structure, it could take advantage of the good credit of the utility to finance risky ventures. The effect of this action would be to raise the cost of debt to the utility and lower the cost of debt to the other subsidiaries. The higher cost of debt would increase rates to telephone customers.

The impact on the deregulated subsidiary could be substantial. By providing access to low cost money, the holding company decreases the deregulated subsidiary's costs. This advantage could

provide the subsidiary with a significant edge over competitors who must raise their own funds.

When diversification leads to failure, the effect on the utility can be catastrophic. It can be drained of funds to support the failure, and it can be denied access to the capital markets due to the poor performance of the parent company.¹³¹

The requirement to obtain equity funding in capital markets automatically provides minority stockholders. The percent of equity to be raised needs to be significant enough so that these stockholders will be a factor in corporate decision-making. A level such as 20 percent of the equity funding for minority participation should be sufficient to achieve this goal.

Historically, the existence of minority stockholders has had an effect on the telephone industry. First, as discussed in Section IX-C., wholly owned subsidiaries of AT&T had to purchase from Western Electric. In contrast, Southern New England Telephone, a Bell Company with significant minority stockholder ownership, was able to purchase from both Western Electric and non-Western Electric suppliers. Second, during an early stage of its development, AT&T was ordered to divest its Midwest operating company, Central Union Telephone Company. This operating company was owned jointly by AT&T and minority stockholders. The order to divest was based, in part, on AT&T's practice of passing on the cost of technological change to operating companies that were partly owned by the minority stockholders. This practice, however, denied these operating companies, and thus the minority stockholders, the opportunity to share in the gains from the technological change.¹³²

Minority stockholders constitute another group to whom the company must be accountable. This additional safeguard has proven

¹³¹ The examples of Arizona Public Service (an electric utility) and Pinnacle West Capital Corporation (the holding company) clearly demonstrate this process. Pinnacle West purchased Merabank, which needed an immediate cash infusion of \$507 million due to sustained real estate losses. Because of these problems, Pinnacle West's stock was given the lowest possible safety rating by Value Line. See Value Line Investment Guide (December 1, 1989), p. 1727.

¹³² Under a settlement agreement following the court decision, AT&T retained control of Central Union Telephone Company. See David Gabel, "Divestiture, Spin-offs, and Technological Change in the Telecommunications Industry--A Property Rights Analysis," Harvard Journal of Law and Technology, (Spring, 1990, forthcoming).

valuable in the past and should be part of a separate subsidiary requirement for RBOCs.

B. The FCC and the State Commissions Must Have the Right to Review Affiliate Interest Transactions.

Affiliate interest transactions occur whenever there is a purchase or sale of products or services between one subsidiary and another. Traditionally, there has been a general contract between the holding company and the BOCs to pay for a variety of financing, executive, legal and other services.

The right of the FCC and state commissions to review affiliate interest transactions includes not only the purchase agreements and contracts prior to execution, but also the books and records of the affiliates. These latter are needed to insure that the regulated operating company receives a fair deal.

The laws in many states do not grant the state commissions the right to investigate affiliate interest transactions. Given the changing nature of the holding company operations, however, it is becoming imperative that state commissions have this authority. The problem of regulating the holding company will be severely aggravated by the release of the RBOCs from the MFJ line of business restrictions. Therefore, it is necessary that each jurisdiction in which an RBOC operates has the right to investigate all the affiliates.

This authority is needed even in the regulatory environment of separate subsidiaries because separate subsidiaries do not reduce the incentive of the partially regulated company to increase its profits through cost shifting. Separate subsidiaries only provide a bright line that can be seen if the regulator has the right to look. Affiliate interest legislation grants the regulator that right and affiliate interest legislation is, at a minimum, a necessary complement to separate subsidiary safeguards. It must be recognized, however, that the combination of separate subsidiaries and affiliate interest legislation is not sufficient to prevent improper RBOC behavior. In order to reduce RBOC abuses, it is also necessary to provide the regulatory commissions with the financial resources needed to use the safeguards, and the leadership resources needed to direct their staffs to apply the safeguards effectively.¹³³

¹³³ The RBOCs have argued that the release of confidential information pertaining to the costs of products sold by and marketing efforts of their nontelecommunications would cause these subsidiaries considerable harm. State commissions that have obtained such information readily acknowledge the problem. These state commissions maintain a number of safeguards, such as mandating the parties sign proprietary

Recently, the New York Public Service Commission (NYPSC) and the FCC have used their authority to investigate affiliate transactions to audit the relationship among NYNEX's regulated and nonregulated subsidiaries. NYNEX established its nonregulated Material Enterprises Company (MECO) for the purpose of purchasing goods and services for its regulated telephone operating companies. The alleged intent of this organizational structure was to save money through volume purchases. These savings would be passed on to the customers of the regulated utility. In actuality, substantial mark-ups have been added to the purchases, costs to ratepayers have risen and profits to NYNEX have increased. For example, MECO accepted a \$574,000 bid to remove switches and charged New York Telephone \$832,000 for the removal without providing any of the service. MECO purchases circuit boards for NYNEX. These boards can be bought for about \$60, but MECO charges the operating companies \$79 plus handling.¹³⁴

After evaluating the report of its auditors, the FCC found that the New York Telephone Company and New England Telephone and Telegraph Company apparently had violated the regulations governing transactions between the BOCs and their nonregulated affiliates. The FCC proposed fines of \$1.4 million on the companies as a penalty, and proposed reducing interstate rates by \$35 million to reflect the removal of alleged improper expenses and investments. The BOCs were given a 30 day period to show cause why the penalties should not be imposed and the rate reduction should not be ordered.¹³⁵

The staff of the New York Department of Public Service has conducted a separate investigation of New York Telephone Company/MECO activities. They determined that New York Telephone already had incurred \$25-28 million in excessive costs prior to May 1988. In addition, it suggested that the company's depreciation expenses be lowered by \$61 million after May 1988.¹³⁶ Moreover, the audit notes that New York Telephone switched from its policy of using MECO for central office equipment removal to using

agreements and holding in-camera sessions, to protect the information.

¹³⁴ John R. Wilke and Mary Lu Carnevale, "Wrong Numbers: Nynex Overcharged Phone Units for Years An FCC Audit Finds," The Wall Street Journal, January 9, 1990, pp. A1 and A6.

¹³⁵ In the Matter of New York Telephone Co. and New England Telephone and Telegraph Co., Order to Show Cause, FCC 90-57 (February 1990).

¹³⁶ State of New York Department of Public Service, An Operational Audit Report on New York Telephone Company's Central Office Equipment Removal Effort, December 1989, p. 21.

competitive bidding for these jobs after the audit process was initiated. With competitive bidding, the average price per job decreased by 111 percent.¹³⁷ These audit activities demonstrate the need for constant monitoring of intracorporate transactions because they have shown that, whenever there is a possibility of increasing profits at the expense of the regulated customer, the RBOCs will find the way to exploit that possibility. Therefore, it must be recognized that any release of the RBOCs from the line of business restrictions must be associated with not only separate subsidiary safeguards and affiliate interest legislation, but also with significant increases in the financial resources of the regulatory commissions and with the willingness to use those resources in an effective manner.

C. The FCC and State Commissions Must Have the Right to Establish Rules Governing Affiliate Transactions.

Rules governing affiliate interest transactions are needed because unsupervised holding companies will develop rules and procedures that favor in-house buying to the detriment of competition. Such rules, as a requirement for competitive bidding on any large purchase or a limit of 50 percent of any equipment type purchased from affiliate vendors, support the market mechanism.

The history of AT&T demonstrates that regulatory rulemaking with regard to affiliate transactions is necessary to overcome the tendency to purchase in-house. For example,

The existence and strength of this bias was candidly confirmed by Joe Hunt, chief operating officer of Southwestern Bell and formerly an executive of AT&T. During a meeting to discuss Southwestern Bell's approach to procurement from the general trade, Mr. Hunt summed up his views in the presence of a number of his subordinates: "If my brother-in-law sold Chevrolets, you know where I would buy my car." [Brown Tr. 8066-8067.]

Because of this bias, the Bell operating companies often purchased products from Western that were more expensive than or inferior to comparable products from other manufacturers. For example, the Bell operating companies, with the exception of the minority-owned Southern New England Telephone Company (SNET), purchased defective key telephone units or line cards from Western Electric whenever they were available, despite

¹³⁷ Ibid., pp. 7-8.

the availability of superior equipment at a comparable or lower price from ITT and SAN-BAR.¹³⁸

In addition, the recent example of NYNEX and MECO demonstrates that the mere existence of an opportunity to exploit intracompany transactions is sufficient incentive for a firm to manipulate these transactions in order to increase its profits. To counteract these incentives, regulators must have the ability to insure that purchases are made in a fair and open manner. Only through regulatory rulemaking (or the maintenance of the line of business restrictions) will improper purchasing practices be avoided. The rulemaking must establish a process that directs the firm to produce its services in the least costly manner. As a result of its audit of New York Telephone Company's central office equipment removal effort, the staff of the New York State Department of Public Service recommended 18 specific rules to govern the interactions of New York Telephone and MECO and to oversee New York Telephone's building space and warehousing programs.¹³⁹ If these rules had been in effect and effective prior to 1985, the problems would have been avoided. It is clearly necessary for state commissions to be empowered with rulemaking authority regarding intracorporate transactions.

D. The Subsidiaries Must Share Only A Chief Executive Officer and a Limited Number of Directors.

The subsidiaries of the holding company must share only a chief executive officer or president, and have a board of directors, no more than 20 percent of whom are employees, officers or directors of any affiliated company. Outside board members employed by the same company (for example, a bank or insurance company) must not sit on the board of directors of the holding company and one of the subsidiaries.

As long as the holding company exists, there always will be some amount of shared resources and personnel among the various subsidiaries, but the purpose of separate subsidiaries is to limit the amount. The minimum amount that can be shared is a chief executive officer. Here it is suggested that the sharing be limited to the chief executive officer and 20 percent of the board of directors. Even this sharing can lead to anticompetitive behavior, as the recent history in the electric industry has shown.

¹³⁸ Plaintiff's Memorandum In Opposition To Defendant's Motion, U.S. v AT&T, 524 F. Supp. 1336 (D.D.C. 1981) (No. 74-69B).

¹³⁹ State of New York Department of Public Service, An Operational Audit Report on New York Telephone Company's Central Office Equipment Removal Effort, December 1989, pp. 22-24.

For example, Southern California Edison (Edison) signed a contract to purchase power from Kern River Cogeneration Company (KRCC), owned by a 50/50 partnership between Getty Oil Company and a wholly owned Edison affiliate (Southern Sierra Energy Company). The contract terms, negotiated by Edison personnel who were also officers of KRCC, provided KRCC with advantages and profits not offered to other cogenerators. The special favors included (1) excessive capacity charges, (2) retention of levelized payments if the contract were cancelled at an early date, and (3) firm capacity payments without a commitment to support Edison's maintenance schedule.

First, excessive charges resulted from the fact Edison agreed to pay KRCC for capacity according to an old rate schedule, when the new schedule included lower rates. Second, levelized rates provided for equal capacity payments over the life of the contract in a situation where there would be no capacity charges in the first years of the contract. The offset to higher early payments would be lower later payments. In a normal cogeneration contract, if the contract is cancelled early, the cogenerator must repay the utility the difference between the levelized receipts of the contract and the unlevelized avoided costs. In the KRCC contract, the cogenerator was relieved of that responsibility.

Third, a utility will make capacity payments to a cogenerator if the cogenerator's facilities are available for use when the utility's facilities are down for scheduled maintenance. The KRCC contract provided the cogenerator with the capacity payments even though the cogenerator would not guarantee capacity availability during Edison's scheduled maintenance outages.¹⁴⁰

Restricting shared resources reduces the probability that such abuses would occur. Similar but more stringent restrictions were part of the consent decree signed by GTE Corp. and the Antitrust Division of the U.S. Department of Justice, governing the relationship between GTE's interexchange subsidiary, Sprint, and GTE's telephone operating companies. Among the restrictions stipulated by the consent decree were: (1) assets can not be transferred between subsidiaries; (2) customer proprietary information only can be obtained on the same terms and conditions that the information is provided to all other competitors; (3) there could be no sharing of boards of directors, employees, or officers (except for the chief executive officer and president of

¹⁴⁰ California Public Utilities Commission, Division of Ratepayer Advocates, "Report on the Reasonableness of Southern California Edison Non-Standard Power Purchase Contracts with Qualifying Facilities," Application No. 88-02-016 (December, 1988).

GTE); and (4) the financing of the acquired affiliates could only be through GTE Corp.¹⁴¹

- E. RBOCs Must Not Be Allowed to Merge with or Acquire Companies which Have a Market Share of 5 Percent or More, or Several Companies which Have a Combined Market Share of 10 Percent or More.**

A primary purpose for releasing the RBOCs from the information line of business restriction is to make information services available to large numbers of users at an accelerated pace and at the lowest possible price.¹⁴² The RBOCs, as new entrants to these markets, must offer innovative services at low prices in order to attract customers from existing providers. At the same time, latter will be forced to bring new services to the market and maintain low prices in order to retain customers. If the RBOCs are allowed to purchase existing providers, however, incentives to innovate and price competitively will be sharply reduced. This would defeat the purpose for allowing the RBOCs into the industry.

- F. The BOCs Must Be Prohibited from Lending Money or Assets to or Purchasing the Debt Instruments of the Other Subsidiaries of the Holding Company.**

Holding companies are the instrument through which resources are transferred from one subsidiary to another. This practice can be either beneficial or detrimental. It has the advantage of allowing resources to be transferred to more profitable and productive lines of business. It has a negative effect if used as a mechanism to damage the financial health of a utility or destroy the viability of a well-functioning corporation.

The relationship between the Bangor and Aroostock Corporation (BAC), the Bangor Punta Alegre Sugar Corporation (BPASC), and the Bangor & Aroostook Railroad (BARR) highlights the problems. BAC was created in 1960 as a holding company for BARR. In 1964, BAC merged with the Punto Alegre Sugar Corporation to form BPASC.

¹⁴¹ U.S. v. GTE Corp., 1985-1 Trade Cases 66,355 (D.D.C. 1984).

¹⁴² In the comments of the D.C. PSC submitted on May 17, 1990 to the Energy and Communications Committee of the U.S. House of Representatives, on its staff's draft legislation on the MFJ, the D.C. PSC took the position that the manufacturing line of business restriction should not be revoked. In this section, the need to restrict merger activity among information service providers is discussed. If legislation that allows RBOC entry into manufacturing is passed, this merger safeguard also should be applied to the manufacturing activities of the RBOCs.

A series of financial transactions between the railroad and its holdings between 1960 and 1969 succeeded in transferring a significant amount of wealth from the railroad to the holding company. First, in 1960, BARR loaned BAC \$1,187,700. Most of this loan was paid off through a special dividend from BARR to BAC in the form of cancelled promissory notes. Second, a capital gain of \$780,000 associated with the sale of St. Croix Paper Company common stock was shifted from BARR to BAC. Third, BARR loaned BPASC \$7 million. While these funds were returned, no calculation of the interest savings that accrued to BPASC was made.¹⁴³

The recent financial transactions between Eastern Airlines and Texas Air also show the same type of wealth transfer. First, Eastern sold two computer reservation corporations, Systems One Direct Access Inc. and EAL Automation Systems Inc to Texas Air for \$100 million. Payment was made by a note carrying 6.5 percent interest due in 2001. Investment bankers have valued the computer reservation corporations at around \$200-320 million. Second, Eastern sold Continental, a corporate affiliate, eleven gates at Newark International for \$11 million, but Eastern sold Piedmont eight gates at Charlotte, N.C., for \$25 million. Third, Eastern paid Continental a \$1 million fee when Continental purchased a 50 percent interest in a feeder airline that serves Eastern. Continental's outlay was only \$1.5 million.¹⁴⁴

These transactions show that it is extremely difficult for corporate sisters to carry out transactions in an arm's-length manner. The benefits of the transactions usually will be one-sided; the beneficiary will be the subsidiary through which the parent company can maximize its interests while the interests of the ratepayers will be undermined. Furthermore, if these transactions are allowed, the holding company will be able to undermine the provision that each subsidiary must have its own capital structure. Above all, the utility's financial health can be so severely damaged that it no longer can meet quality of service standards or invest in cost-saving and quality-enhancing technologies.

¹⁴³ Bureau of Accounts of the Interstate Commerce Commission, Review of Diversified Holding Company Relationships and Transactions of Bangor Punta Corporation, 1971, pp. 20-27.

¹⁴⁴ Thomas Petzinger, Jr., and Paulette Thomas, "House of Mirrors: Lorenzo's Texas Air Keeps Collecting Fees from Ailing Units," Wall Street Journal, July 1, 1988, pp. 1, 24.