middle of the decline of costs for a number of other services.[28]

However, there has been virtually no decline in the price of basic service. This is the origin of over $4 billion per year of excess earnings enjoyed by the telephone companies, which result in overcharges of $5 billion when taxes are figured in. The subsidy tax pool will insulate the companies' bottom lines from competitive pressures.

V. A PRAGMATIC APPROACH TO THE "SUBSIDY" ISSUE

These contrary findings about the nature of the subsidy should give policy makers reason to look much more carefully before they leap into a $20 billion federal tax.

- The very existence of the "subsidy" is in great doubt, not to mention its magnitude.
- The economics of local exchange service differ dramatically from place to place.

It should be clear that the federal government cannot possibly determine the "subsidy."

Let us assume, as proposed by legislation in the House and Senate, as well as the general policy statements of the Administration, that the federal government mandates the opening of the local exchange to competition. What would an appropriate federal role on the "subsidy" be? Federal action should be governed be a few fundamental principles.

A. USER PAYS COST-BASED RATES THAT MINIMIZED THE COST BURDEN ON BASIC SERVICE

First, the Federal government should provide a cost-based mechanism for the information age based on a user pays principle.

- It should insist that all users of the network pay for all services they use in proportion to the demands they place on the network.

Conceptually, this is the perfect moment for federal regulators to give up the notion that basic service came first and everything else is incremental. If this is a new age and we are building a new information superhighway, then there is no reason to consider plain old telephone service the cost causer which bears the cost of the network, while other services are

incrementally priced. The economic evidence shows overwhelmingly that it is not the cost causer.

- The user pays principle should be combined with the principle that the burden on basic service should be minimized.

By the very definition of basic service, it should be a low margin service. However, federal ratemaking and cost allocation must be sensitive to more than just basic service. Network functionalities that have the characteristics of public goods or externalities should be identified and subject to mass market pricing.[29]

B. TAKING COSTS TO THE FEDERAL LEVEL

Second, to alleviate pressures on local rates, the federal regulatory agency can move costs currently allocated to the state jurisdiction to the federal jurisdiction.

- It can require states to reduce the local exchange costs in an amount equal to the costs taken to the federal level.

This would be entirely appropriate since the Federal Communications Commission has declared video dial tone revenues to be in the federal jurisdiction, but it has not moved any additional costs to that jurisdiction. It would also be appropriate since, as noted above, the last round of federally mandated costs (equal access, 800 number portability) imposed costs that have ended up in the basic service category.

At a minimum, the costs created by federal policy mandating behaviors at the state level should be identified.

- These costs imposed by federal policy should certainly be taken to the federal level to prevent them from further distorting the estimate of basic service costs.

C. STATE EVALUATION OF COST PRESSURES AS COMPETITION DEVELOPS SUBJECT TO FEDERAL GUIDELINES ON LOCAL RATE INCREASES

Third, as a practical matter, whether a subsidy exists and how it should be collected and administered should be left to the states, which is where 75 percent of the costs of telephone service are recovered. Moreover, since the subsidy problem, if there is one, is being caused by the growth of competition, the issue should be addressed only as real competition unfolds.

From the point of view of enhancing efficiency, even if there is a subsidy, it would be a great mistake to start with a tax that is equal to almost one-third of all the revenues collected at the local level.

- Competitive pressures may or may not develop.
- They may or may not require increases in local rates.
- They may first result in forcing local exchange company profits back down to reasonable levels.
- They may cause the companies to reconsider their cost allocation approaches.
- They may cause the companies to be more careful in their investment decisions.
- If technology has rendered the LEC approach to provision of basic service uneconomic, they may cause the companies to write down their assets, as firms facing competition frequently do.

Only after the rigors of real competition have exposed the true economics of the local exchange market, should we consider subsidies necessary to prevent local rate increases and preserve universal service.

Therefore, as the states implement any mandate to promote local competition, the federal government could set broad guidelines for preserving the affordability of universal service.

- They should be required to conduct a universal service pricing inquiry.

- They should be encouraged to adopt rigorous cost allocation approaches that recognize loop costs as joint costs.

- The federal government could set guidelines for competition driven rate changes (for example a hold harmless rule, or a maximum rate increase rule).

- The states should be allowed to decide how to fund those changes (subsidy pools, price changes for non-basic services, even general taxes).

These guidelines would apply only to rate changes made necessary by changes in federal policy. Other aspects of local ratemaking, such as rates of profit on local service and other pricing policies, should be left to the states.

1. See, for example, Anthony Ramirez, "Providing for the Have- Nots of the New Information Age," New York Times, January 23, 1994, Section 4, p. 6.

2. Telecommunications Policy Reform Initiative, January 11, 1994, p. 3.

Similarly, H.R. 3636, the National Communications Competition and Information Infrastructure Act of 1993 (S 102 6 (A), never questions the existence of this gap when it establishes

> a Federal-State Joint Board under section 410 (c) for the purpose of recommending actions to the Commission and State Commissions for the preservation of universal service. As part of preparing such a recommendation, the Joint Board shall survey providers of telephone service and consult with State Commissions in order to determine the pecuniary difference between the cost of providing service and the prices determined to be appropriate for such service.

3. United States Telephone Association, Potential Impact of Competition on Residential and Rural Telephone Service, July 1993 (Hereafter USTA, July 1993).

4. See Telecommunications Policy Reform Initiative, p. 7; and Eli Noam, "NetTrans Accounts: Reforming the Financial Support System for Universal Service in Telecommunications," Universal Service in the New Communications Environment, October 15, 1993.

5. Teleport Communications Group, Universal Service Assurance: A concept for Fair Contribution and Equal Access to Subsidies, December 1993; Petition of MFS Communications Company Inc. for Notice of Inquiry and En Banc Hearing," and Federal Communications Commission, In the Matter of Inquiry into Policies and Programs to Assure Universal Service in a Competitive Market Environment, RM No. 8388.

6. In addition to Noam, "NetTrans...," see Bruce L. Egan and Steven S. Wildman, "Funding the Public Telecommunications Infrastructure," and Michael A. Einhorn, "Recovering Network Subsidies Without Distortion," both in Universal Service in the New Communications Environment, October 15, 1993.

7. Mark N. Cooper, "Comments of the Consumer Energy Council of America," In the Matter of the Petition of the State of Michigan Concerning the Effects of Certain Federal Decisions on Local Telephone Service, before the Federal Communications Commission, CC Docket No. 83-788, September 26, 1983.

8. "Testimony of Mark N. Cooper on Behalf of the Mississippi Legal Services Corporation," Re: Notice of Intent to Change Rates of south Central Bell Telephone company for Its Intrastate Telephone Service In Mississippi, Before the Public Service Commission, Docket No. U-4415, January 24, 1984 (hereafter Cooper, 1984), identified concerns about cost causal analysis, which were heightened by divestiture.

In the past decade or so, the cost causers in the system have come to be enhanced services, such as data transmission, video, etc. Again, no one paid attention as long as the company continued to make the internal transfers necessary to keep rates generally reasonable.

Now, because of divestiture, cost causation is to be a matter of concern. I suggest that the Commission must pay very careful attention to who uses the system, for what purposes, at what costs, and whether or not they had a choice in the services they were forced to take (p. 8)...

Where competition is absent in the provision of essential commodities, consumers are truly captive. Assessment of the needs of consumers is necessary because the marketplace does not provide a range of choice. Careful examination of how and why costs are incurred is necessary because the marketplace does not discipline the supplier of the commodity. There is no guarantee that the monopolist will behave in either a socially acceptable or an economically efficient manner. The incentives to create cross subsidies, overbuild the ratebase, and/or prevent entry by potential competitors is very strong.

With respect to simple fairness, it is clear that the use of the system should not be allowed without contribution to the costs of the system (pp. 16-17)...

The new problem the Commission faces in the era of divestiture is that not only must it decide that an expenditure prudently contributes to the provision of service, but it must decide to which service it contributes. It must be much more careful in differentiating the rate base among services. The task is large, but no different in principle.

9. Richard Gable, Development of Separations Principles in the Telephone Industry (Michigan: Michigan State University Press, 1967).

10. Richard Gable, The Impact of Premium Telephone Service the Technical Design, Operation and Cost of Local Exchange Plant (Washington, D.C.: American Association of Retired Persons, 1992).

11. State of Indiana, Indiana Utility Regulatory Commission, In the Matter of a Petition of Indiana Bell Telephone and Telegraph Company, Incorporated, for the Commission to Decline to Exercise in Part its Jurisdiction over Petitioner's Provision of Basic Local Exchange Service, to Utilize Alternative Regulatory Procedures for Petitioner's Provision of Basic Local Exchange Service and Carrier Access Service, and to Decline to Exercise in Whole its Jurisdiction Over All Other Telecommunications Services and Equipment Pursuant to IC 8-1-2-6, Cause No. 39075 (hereafter Indiana); State of Maine, Public Utilities Commission, Re: Investigation Into New England Telephone Company's cost of Service and Rate Design, Docket No. 92-130 (hereafter Maine).

12. "Testimony of David L. Klingerman," in Indiana: USTA, July 1993.

13. "Testimony of David Gable," and "Harold L. Rees," in Ibid.

14. Conceptual issues involved in deciding how to mark-up services which parallel the analysis in Maine, can be found in Mark N. Cooper, A Residential Consumer View of Bypass of Natural Gas Local Distribution Companies, (Consumer Federation of America: Washington, D.C., February 1988).

15. Examiner's Report, December 23, 1993, in Maine, citations deleted, pp. 79-80.

16. Cooper (1984), identified a similar list of issues in an early post-divestiture case in which the company presented precisely the same arguments utilized in Indiana and Maine (pp. 21-25).

> In the detailed cost studies I have seen, one frequently finds a significant number of erroneous allocations.
>
> First, one frequently finds significant common costs which have been arbitrarily allocated to the local outside plan cost.
>
> Second, one may also find significant quantities of excess capacity that have been built into the system in anticipation of growing demand for enhanced services.
>
> Third, one must scrutinize the design standards applied to the local loop. where costs have been caused by engineering characteristics required by non-voice communications, they should not be allocated to basic residential service.
>
> There are even more factors to consider with respect to central office equipment, since enhanced services will have an even larger impact on the expansion and nature of this equipment...
>
> Similarly, the costs of more complex and sophisticated support services (computer hardware and software as well as personnel) which are necessary to support enhanced services must be carefully charted...
>
> Since captive customers have been saddled with a lot of unwanted and unwarranted costs in the past, the Commission can certainly ensure that new costs are born by cost causers in the present to balance old burdens...
>
> We welcome the information age... We simply want those who will benefit from it to pay for it. If capital is to be redeployed to add services, then those who demand and use the additional services should pay for them. The accelerated obsolescence of capital used by those services should fall of the shoulders of the beneficiaries...

Ignorance of the intention, use and effect of investment cannot be the bias for ratemaking... It matters a great deal how the capital is used because how it is used will determine who benefits. The costs should fall on those who reap the benefits.

17. "Testimony of Richard Gable on Behalf of the Maine Public Utilities Commission," in Maine, pp. 14...15.

18. "Testimony of David Gable," and "Harold L. Rees," in **Indiana.**

19. "Testimony of David Gable on Behalf of Commission Advisory Staff," in Maine, pp. 20-26.

20. Elsewhere [Mark N. Cooper, Milking the Monopoly: Excess Earnings and Diversification of the Baby Bells Since Divestiture, (Consumer Federation of America, February 1994)] we estimate a total of $5 per line per month. The difference stems from a higher costs of capital used by OUCC, the fact that profits from all services other than residential basic service are not included in this analysis and the fact that we spread excess earnings over residential lines only.

21. Memo from R.T. Burns Assistant Vice President to N. C. Baker, Senior Vice President on "CATV Transport: Catalyst for BISDN", BellSouth Services, June 14, 1988, p. 10.

22. Consumer Federation of America and National Cable Television Association, "Joint Petition for Rulemaking and Request for Establishment of a Joint Board," In the Matter of Amendments of Parts 32, 36, 61, 64 and 69 of the Commission's Rules to Establish and Implement Regulatory Procedures for Video Dialtone Service, before the Federal Communications Commission, April 8, 1993.

23. "Comments of Dr. Mark N. Cooper on Behalf of Consumers Union, Southwest Regional Office," before the Public Utility Commission of Texas, Request for Comments on the Method by which Local Exchange Services are Priced, Project No. 12771, April 18, 1994.

24. "Direct Testimony of Dr. Mark N. Cooper on Behalf of Office of Consumer Counsel," before the Public utilities Commission of the State of Colorado, In the Matter of the Investigatory Docket Concerning Integrated Services Digital Network, Docket No. 92I-592T, March 26, 1993.

25. Mark N. Cooper, Developing the Information Age in the 1990s: A Pragmatic Consumer View (Consumer Federation of America, June 8, 1992.

26. Under the FYI Tennessee plan.

27. Mark N. Cooper, Developing the Information Age in the 1990s: A Pragmatic Consumer View (Washington, D.C.: Consumer Federation of America, June 8, 1992).

28. Studies across a number of jurisdictions show productivity increases for local exchange service of 5 to 6 percent per year have been found in a number of states including California and Pennsylvania.

29. Mark N. Cooper, "Delivering the Information Age in the 1990s," Telecom Infrastructure, 1993, Volume One: Government Initiatives to Spur Network Modernization (Telecommunications Reports, 1993, Report Series No. 5).