calls. Yet the PSPs readily endorse the high rates it produces. Unfortunately, while arguably simple, the avoided cost approach is doomed to fail. In order to serve the public interest, a legitimate top-down cost study must start with an appropriate rate. That rate, as Dr. Baumol explains, must exhibit 6 criteria:

1. The price should equal or at least approximate the level one can expect to emerge in a market characterized by effective price competition.

2. This means that the price should correspond to the costs of suppliers.

3. These costs should be those of maximally *efficient* suppliers and should not be sufficient to cover the costs of inefficient firms, for otherwise the certain result will be wasteful supply operation and excessive prices to consumers.

4. The price for any of the services at issue should cover the corresponding cost of an efficient supplier.

5. However, in addition, the prices and the resulting revenues of all pertinent services together should permit an efficient firm to cover its fixed and common costs and provide a competitive return on investment.

6. The differences between the prices and the corresponding incremental costs should be determined in a way that does not impede the competitiveness of any of the firms affected.

Baumol Decl. at 16. Hence, it is obvious that any cost analysis, top-down or bottom-up, will require effort. Clearly this effort is worthwhile, because it promises to protect consumers from potentially hundreds of millions of dollars in overcharges each year.

IV. IF THE COMMISSION PERSISTS IN USING THE AVOIDED COST APPROACH, IT MUST MAKE THE ADJUSTMENTS DESCRIBED IN AT&T'S PETITION FOR RECONSIDERATION

If the Commission ignores the overwhelming weight of evidence that the 28.4 cent coinless rate is excessive and adheres to the carrier-pay, avoided cost approach based on the local coin rate, it must still correct several errors that were made in implementing that approach. First, the Commission erred in relying on IPP cost data to the exclusion of relevant data regarding LEC

PSPs' costs. AT&T demonstrated in its Petition for Reconsideration (at 12-15) that the Commission improperly failed to consider the LEC cost data that was available and that indicated the costs of an efficient PSP are significantly lower than IPP costs. As discussed in Section II, a number of commenters agree with AT&T that LEC cost data must be used in establishing the compensation rate for coinless calls. Failure to rely on data regarding the most important industry suppliers would be the epitome of arbitrary and capricious rulemaking.

Second, the Second Report and Order failed to deduct the profit on avoided costs. As a result, the coinless rate provides PSPs with a higher profit margin on coinless calls than the assumed profit on local coin calls. Hence, the Commission should increase the net avoided cost reduction of 6.6 cents to exclude profits on that 6.6 cents as well. See AT&T Petition for Reconsideration at 17-18.

Third, the Commission deducted too small an amount for local call completion. Commenters have provided the Commission with overwhelming evidence that 5 to 8 cents should be deducted for local call completion, not just 2.75 cents. See AT&T Petition for Reconsideration at 18. At approximately $30 million for each addition penny added to the coinless rate, this one error alone could cost consumers over $150 million each year.

Fourth, there should be no add-on for Flex-ANI cost. The USTA study on which the Commission based its decision to include a 1 cent ANI charge was monumentally flawed. AT&T Petition for Reconsideration at 19. Instead of $600 million in costs to implement Flex ANI, USTA now admits that it will cost just a tenth of that amount. Id. In all events, AT&T also has shown that these de minimis costs should be borne by the PSPs because they are set-up costs that PSPs must incur to receive payphone compensation. Id. at 20.

Finally, despite these huge cost overstatements, the LEC Coalition continues in its attempts to "fine-tune" the avoided cost calculation. These efforts highlight the PSPs' willingness to make any argument that might increase rates above the already excessive levels. For example, while admitting the current compensation rate is just and reasonable, they simultaneously argue that it should be greatly increased. See, e.g., LEC Coalition at 8-10 (advocating higher coinless rates based on 0+ call costs). In addition, the LEC Coalition (at 30) and the APCC (at 16) maintain that coin mechanisms costs are not avoidable, a position AT&T and other carriers have thoroughly refuted. See, e.g., AT&T's Opposition to and Comments on Petitions for Reconsideration, dated January 7, 1998 at 12-14. Not satisfied to stop at their request for coinless rates to recover the costs of the coin mechanism, these PSPs even insist that costs of coinless calls are equal to local coin call costs. These baseless arguments conclusively show that the PSPs' arguments have no basis in reality.

CONCLUSION

For the foregoing reasons, the Commission should provide for fair payphone compensation by adopting a calling pays compensation system, using a market surrogate analysis, or developing an efficient cost-based rated using LEC PSP data.

Respectfully submitted,
AT&T CORP.

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July 27, 1998

Attachment 1

List of Commenters

AirTouch Paging ("AirTouch")
Allen Lund Co., et al.
American Public Communications Council ("APCC")
AT&T
Cable & Wireless
Citicorp Services
Competitive Telecommunications Association ("CompTel")
Consumer-Business Coalition for Fair Payphone 800 Fees ("Consumer-Business Coalition")
Excel Communications
Frontier Corp.
International Telecard Association
IXC Communications Services
LCI International
MCI
New York State Department of Public Service ("NYDPS")
Paging Network
Personal Communications Industry Association ("PCIA")
PocketScience Inc.
RBOC/ GTE/ SNET Payphone Coalition ("LEC Coalition")
Rhode Island, State of & Providence Plantations
SkyTel Communications ("SkyTel")
Sprint Corp.
Telecommunications Resellers Association ("TRA")
Vocall Communications Corp. & Galaxy Long Distance ("Vocall")
WorldCom

DECLARATION OF WILLIAM J. BAUMOL

July 27, 1998

ANCHORS ASTRAY: UNACCEPTIBILITY OF "TOP-DOWN" PRICING FROM AN INDEFENSIBLE STARTING POINT

William J. Baumol

The LECs and their colleagues are attempting the same ploy once again. They are advocating procedures that can, in certain circumstances be defensible, but then undermine whatever justification those procedures may have by selecting, with no justification, their current prices as anchors for the entire process. Obvious logic tells us that any calculation that starts off from an unacceptable number and then subjects it to a sequence of calculations cannot be taken to yield a rational result no matter how justifiable the intervening calculations may be.

I shall show here that the payphone service providers (PSPs) have done precisely that. They have advocated what is referred to as a "top-down" procedure for calculation of the proper price for coinless calls, starting from one of the prices currently charged for local coin calls, proposing to deduct from this figure as small an amount as they believed they could get away with. The price figure for local coin calls was said to be appropriate because, allegedly, it was the result of effectively competitive market forces.

Competitiveness, in turn, was supposedly demonstrated by the large number of suppliers in the field, blithely ignoring the fact that few of these firms ever compete directly at any particular location, and virtually never compete in terms of price. Rather than constituting a competitive industry they have, in effect, formed themselves into a geographic cartel, with each firm having its own exclusive territory in which it is largely immune from price competition.

It is also argued that competitiveness of the market is demonstrated by the apparent proximity of the prices and costs of some of the suppliers (presumably the least efficient among them). But equality of costs and prices is a necessary, not a sufficient condition for competition. As I will show, in the circumstances surrounding the payphone industry, costs and prices are driven toward equality not by prices being driven down toward costs, as they would be under effectively competitive conditions. Rather, here the result is achieved by costs being raised toward excessive prices. This always happens when there is no price competition but entry is easy. In such cases, the high prices encourage the entry of high-cost inefficient suppliers who can operate profitably by virtue of the immutability of prices. But the real gainer in such a case is the dispensers of entry permits (the medallion owners in the case of New York Taxis, the landlords in the current circumstances). Thus, if excessive prices for coinless calls are permitted to prevail, ironically, few of the PSPs will benefit in the long run. The only clear gainers will be the landlords and the clear losers will be consumers. Consequently, under the conditions that characterize the payphone industry where there is no discernable, reasonable starting point from which to conduct a top-down calculation, a bottom-up approach must be used.

There do exist proper top down pricing procedures. But any acceptable procedure must start off from a fully justified market price. And in the absence of a fully competitive market, demonstration of the proper level of the local coin-call price is just as demanding as the calculations in a bottom-up price determination, and in many ways the steps entailed in the two are very similar. Thus the claim that a top-down calculation avoids the difficulties of a bottom-up calculation is surely disingenuous.

This statement will make no attempt to reply point-by-point to the particular contentions of the distinguished affiants who have provided submissions on behalf of the PSPs. I believe the logic of my analysis speaks for itself and creates no need for contentious debate on particular points.

Top-Down Procedures: Crucial Role of the Starting Point

The obvious but critical feature of any top-down procedure for the determination of the price of a component of a final product, call it service X, is that the procedure starts off from some other price, usually the price of some supposedly similar final product. The process then adjusts that observed price to arrive at a new price figure, said to be better adapted to the requirements of service X. It follows that, no matter how good the subsequent adjustments, if the anchor price – the price from which the calculation starts off – is inappropriate, then the proposed price for service X that emerges from the calculation is virtually certain also to be indefensible.

This clearly means that the anchor price for the calculation should not be selected arbitrarily. It must be chosen with care, and it must be subjected to careful examination to ensure that it fully satisfies the appropriate requirements. In the matter at issue here this means either that the anchor price must demonstrably emerge from a fully competitive market or that it must be evaluated fully in terms of the appropriate costs incurred by suppliers and the principles for public interest pricing of services relative to the pertinent costs and other market conditions.

In this case, the proposed anchor price is a price for local coin calls. Here, I say "a price" rather than "the price" because, as I understand it, that price is not the same in all geographic areas. Indeed, the price that has been proposed as anchor for the calculation is far from the lowest price that is currently charged for local coin service. I also understand that there has been no systematic quantitative analysis evaluating the pertinent costs or other relevant data. Thus, if it can be shown, as I will demonstrate below, that the prices in question were not determined in a market characterized by effective price competition, and that, indeed, the suppliers of local coin service are in a position to set their prices as they wish, at least within considerable limits, then the proposed anchor price must at best be rejected as arbitrary. Indeed there is reason to conclude that it is not only arbitrary, but considerably excessive.

In any event, it is clear that mere assumption that a current local coin price is an acceptable anchor does not make it so. The evidence needed to demonstrate its acceptability in the absence of a market with vigorous price competition is complex. If that price is to meet the public interest standards, it must be evaluated in terms of marginal or incremental cost, though not set equal to either of them. Instead the price must by adjusted to make possible the recovery of any fixed and common costs of the supplier in providing local coin service along with its other products. In short, the only way to ensure the acceptability of the anchor price in the absence of vigorous price competition is to subject the anchor price to just those bottom-up calculations that the PSPs and their witnesses so emphatically deplore. Thus, unless it can be shown that the proposed anchor price emerges from a market in which price competition is effective, the top-down approach cannot do what is claimed for it. It does not eliminate the need for demanding bottom-up calculations. It only transfers the calculation to the price of another service. I will return to this point later.

Is a Large Number of Suppliers Sufficient to Ensure Price Competition?

Apparently recognizing that some such problems are present, the PSPs have understandably chosen to go the other route, defending their proposed anchor price with the claim that the market is indeed competitive. A major element in their argument is the large number of firms said to serve as payphone service providers.

But this is another matter on which one must not jump to conclusions. In evaluation of the competitiveness of a market the use of questionable numbers games is all too common. It is by now well known that even if the number of firms in a market is small the market may nevertheless be highly competitive. This will most clearly be true if entry into the market is quick and easy and viable potential entrants are readily available. Nor does the converse inference necessarily follow. A large number of suppliers in an industry is no guarantee of effective competition or even of any price competition at all.

Before showing why this can be so and why in the circumstances at issue it actually *is* so, let me first note that mere counting of the number of suppliers of PSP services can be deceptive. If many of the firms that are extant are subject to common control and direction then they cannot be expected to compete. In that case their mere number patently is no indicator of competitiveness in the market. This observation is clearly pertinent here, or is likely to become so in the near future, given the mergers that are in prospect. I have been given to understand that if the proposed mergers are in fact carried out, the bulk of the nation's PSP activities will be under the control of some half dozen entities. This, by itself, neither proves nor disproves the contention that the pertinent markets are effectively competitive, but it does counsel extreme caution in taking the number of firms at face value.

But even if the number of firms in an industry is large, we know that a cartel or some other collusive arrangement can ensure that no price competition actually takes place. It is important to note here that for this to be true the cartel need not be the result of a monopolizing conspiracy undertaken by the firms in question. A cartel arrangement can be thrust upon them by governmental decree or by fortuitous circumstances. For example, misguided governments have more than once divided markets into exclusive territories each served only by a single supplier completely shielded from the pressures of competition. In other cases governments have decreed that only a limited number of firms will be licensed to serve in an industry and their prices have been set by fiat so that even a large number of independent suppliers could not inject any price competition into the market.

In PSP activities, it is neither conspiracy nor government decree that has eliminated price competition. Rather, it is the nature of the activity itself that has had this result. Payphones cannot just be installed without restriction wherever the supplier wishes. Rather, the PSP firm must obtain the right to do so from the proprietor of the location – the landlord. Generally, it is not in the landlord's interest to offer access to a given location to two or more rival PSPs, since competition will drive down the value of the site to them and will therefore reduce the rent the landlord is able to extract. Consequently, it is hardly surprising that, as I am informed, virtually all sites served by PSPs are served by just a single supplier. Economic analysis suggests the explanation I have offered, but whatever the reason the fact is that most territories are in fact exclusive, that consumers do not have an effective choice, because *at virtually all locations there really is no competition.*

Thus, one must reject as sheer fantasy the notion that the consumer who approaches a coin telephone seeking to make a call, can vote with his feet if he considers the price of local coin calls on that telephone to be excessive. There is almost never a telephone of a rival firm within reasonable distance and readily observable to which the consumer can turn in hope of a more reasonable price. Even if another firm's telephone is known to be available not very far away, the customer has no way of knowing whether going to it is worth the effort, since he has no way of knowing whether, when he gets there, he will not find the price to be even higher.

This is not mere theoretical conjecture. Quite the contrary, it is reality. Can anyone seriously claim to have seen many examples of customers, out to make a single call, shopping around from phone to phone? Has anyone ever seen a profusion of competitive advertisements by different PSPs, each claiming to offer lower prices than the other? In contrast, we constantly see such TV advertisements of the prices of the rival interexchange suppliers, each dramatically claiming to offer lower prices than the other. The notion that there is effective price competition for coin telephone service is patently absurd. Customers generally have no choice other than the choice of foregoing the desired service. This degree of "freedom of choice" clearly cannot be foreclosed even by the most powerful monopoly, but can anyone seriously claim that this type of freedom of choice constitutes competition?

Price Driven Toward Cost or Cost Toward Price?

Apparently (and predictably) there exist a number of PSPs that operate on the margin of survival. They clearly earn no excessive profits, if they earn any profits at all. This, it can be argued, is confirmation of the claim that the market is competitive in prices, with prices at best serving to cover the costs of these firms. For, it is asserted, competition alone is able to drive prices down sufficiently to eliminate all excessive profits. If there were no competition, prices could be raised sufficiently to bring monopoly profits to all firms in the industry.

The argument is a valid depiction of the way costs and prices are equalized *if* it is done by a competitive process. Vigorous competition does drive down prices whenever they are out of line with costs. But that is not the only way in which equality of revenues and costs can be achieved, and as economic analysis demonstrates, that is not the way such equality is attained in a market situation such as the one pertinent here.

Where prices are constrained but entry is possible, the ensuing process is very different from the one that characterizes price competition. The process is one that has recurred many times in a number of other industries. Part of the story is well illustrated by the travel-agent business during the era when the ticket sale commissions offered to agents by the airlines were fixed at relatively high levels. The consequence of freedom of entry along with fixed and high prices for travel agent services was the establishment of a very large number of agencies. It will be recalled that a few years ago in a large city such agencies were to be found in profusion. The entrants, of course, included both efficient and inefficient suppliers of travel services, because any entrepreneur who believed it possible to establish an agency whose cost would be marginally lower than revenues found it attractive to open for business. Equality of revenues and costs was then achieved not by reductions in prices of services. Rather, it was attained by luring into the market firms sufficiently inefficient to ensure that their costs were sufficiently high to use up the available revenues. This is a common feature of all markets with relative ease of entry but without price competition. We therefore need not be surprised if it can be shown that there exist PSPs for which prices and pertinent costs are similar. But it is clear that this cannot be taken as evidence of the price competition that would, if it were present, ensure the legitimacy of the proposed anchor for a top-down price calculation. For we know that this is how markets work. They lure firms into any arena where there are profits to be made. Any market in which prices are kept high by whatever forces will induce an influx of new firms, and the end of the incursion process will occur when firms sufficiently inefficient to make those prices only marginally attractive have opened for business. Successively less efficient entrants will bring higher and higher entrant costs, and ultimately one can expect entrants whose costs are barely covered by prices. Thus, in this market approximate price cost equality (for marginal firms) is not achieved, as it would be in a truly competitive market, with prices forced down toward costs. On the contrary, the entry of less efficient firms protected by the immobility of prices brings costs upward toward the level of prices.

Clearly, such an arrangement does not qualify as a competitive market. It does not qualify as a state of affairs that serves the public interest. And, most pertinent to the issue here, it does not yield prices that can qualify as competitive or as acceptable anchors for a top-down price calculation. On the contrary, it is clear that this process can be expect to yield prices that are unacceptably excessive, because they have not been affected by competitive market forces capable of driving those prices toward the costs of efficient suppliers. Later I will offer some observations indicating that excessive prices are to be expected here not only on *a priori* grounds, but that there is good reason to conclude that the prevailing prices are in fact excessive.

Prime Beneficiaries of the Process: the Landlords

That is by no means the end of this curious story. Superficial consideration of the matter might lead one to conclude that if the prices of local coin calls as well as coinless calls are excessive, it is the suppliers who will benefit, reaping correspondingly excessive profits. Indeed, as I will show, that is to some degree true. But I will show now that these suppliers are by no means the only beneficiaries. Indeed, the other beneficiaries are the landlords on whose property the coin telephones are located, and they may well be in a position to absorb the bulk of the gains provided by excessive pricing.

First, let me indicate the nature of the gains from excessive prices that accrue to the more efficient PSPs. A stylized example will make the relationships clear. Assume that there are three PSPs potentially in operation in some area, call them Firms A, B and C. Suppose that firm A has unit costs of 10 cents per call, and that the prevailing return to capital is 10 percent, so that an 11 cent price per call would enable A to operate viably. Let the corresponding breakeven prices for firms B and C, respectively, be 25 and 35 cents per call. If price is, in fact, set at 25 cents per local coin call, Firm C will obviously find it impossible to operate. Firm B will experience equality between price and cost (including the competitive cost of capital), thus appearing to be operating in a market characterized by price competition. And at this price, efficient Firm A will be earning a supercompetitive per-call profit of 14 cents (= 25 – 11).

Now consider what happens if price is raised even further, to 35 cents per local coin call. Now firm C will be able to enter, and earn only competitive profits, thus giving the appearance that 35 cents is the competitive price! This it should be noted incidentally demonstrates the speciousness of the argument that price-cost equality demonstrates the competitiveness of prices. For this argument would have us conclude that both 25 cents and 35 cents are *the* competitive price. But returning to our analysis, we see that with this higher price, Firm A is able to increase its excessive profit from 14 to 24 cents per call. And even Firm B will now advance from zero excessive profit to 10 cents in excess profit per call. In other words, as economic analysis has demonstrated for nearly two centuries, in these circumstances rising prices do increase supercompetitive benefits to all firms whose efficiency is sufficient to permit them to do better than merely breaking even at the prices that are not subjected to competitive downward pressure.

But that is not the end of the story. In the circumstances at issue the efficient firms cannot expect to be allowed to keep all those profits. For they must obtain the consent of the owners of the properties on which those firms want to place their telephones, and the landlords will be unwilling to give their consent without compensation acceptable to them. And that compensation is limited only by the excessive profits that the PSPs expect to gain by placement of their telephones on the properties of the landlords. The landlord's rental price is, of course, also limited by the availability of other properties on which equipment can be placed by the PSPs, but since each such location is a profit opportunity for a PSP, an opportunity controlled by a single proprietor, one can expect a substantial proportion of the supercompetitive earnings of the efficient PSPs to go to the landlords, and apparently it does so in fact. This rental fee can be interpreted as a deduction from the price received from the PSPs, so that, returning to my previous example, a 35 cent price from which landlords derive 10 cents in rent becomes for the PSPs equivalent to a 25 cent price, so that the market is driven back to the situation in which Firm C is not viable, Firm B earns only competitive profit, but Firm A is left with 14 cents in excess earnings.

Several conclusions follow. First, it is clear that the absence of supercompetitive earnings for *some* of the PSPs cannot be interpreted as legitimate evidence of price competition. On the contrary, the pattern of earnings is precisely what is to be expected to emerge in a market from which price competition is completely or virtually absent, as it is here. Second, obviously under these conditions there are absolutely no grounds on which to deem the local coin call charge either a competitive price or an acceptable anchor for a top-down coinless call charge. Third, it is clear that the benefits of excessive pricing, while going in part to the more efficient PSPs, can be expected to accrue in large part to the landlords.

Once again, it is important to emphasize that this is not mere theory, and that analogous situations exist elsewhere in the economy. The much-studied market for taxi service in New York City can be cited once again as a prime example. There, it is completely clear that price is completely unaffected by competition. Prices are set by a public-sector agency. The operators of taxicabs, in order to be allowed to supply service, must acquire an expensive medallion from the limited stock of medallions whose number is immutably set by law. As a result, drivers' expected net earnings are minimal, with the profits going to the medallion owners. Any increase in price granted by the Commission adds little if anything to the net incomes of the taxicab operators and goes largely into swelling the profits of the medallion owners – the counterpart here of the landlords in the market for local coin calling. It should be noted that in the case of the taxis it is generally concluded by investigators that the arrangements, so totally at odds with competitive market principles, serve the general interest very poorly. Prices are excessive, service is poor, the number of licensed vehicles available is considerably smaller than that which would be found in a truly competitive market, operators are underpaid, and even current medallion owners hardly benefit since they have had to prepay a heavy charge for their high earnings in the form of the high price medallions command because of the monopoly rents they promise.

What are Proper Deductions from a Proper Anchor Price in a Top-Down Calculation of Coinless Fees?

The preceding analysis should dispel any notion that in the circumstances at issue any prevailing local coin call price can legitimately be used as a starting point for the calculation of a proper fee for coinless calls. This leaves us with the question whether a proper method for calculation of the anchor is available. The answer is that there is, but, as I have already asserted, such a legitimate alternative must be virtually identical to a bottom-up calculation. However, before turning to that, I should say a few words about the calculation steps that are appropriate once a proper anchor for a top-down calculation has been found. That is, how much should properly be deducted from the true competitive level of the local coin call charge to arrive at a suitable charge for coinless calls.

Here, it should be noted that this is an issue to which witnesses for the PSPs have devoted much of their attention, since they proceeded on the premise that these prices are at competitive levels, offering no viable evidence for this mere assumption. I trust that the analysis provided here will lead them to reconsider this assumption. The answer here is that competitive prices for both coin and coinless calls clearly must cover the incremental costs of those services. Thus, TSLRIC is a good starting point for calculation of the proper prices for those services. However, incremental cost is probably not enough. Contrary to what some seem to have hinted, I know of no party to these proceedings who has not recognized the need for prices to permit recovery of the PSPs fixed and common costs (which, by definition, are not included in incremental costs) as well as a competitive return on investment. Thus, one can expect proper prices of coin and coinless calls to include an appropriate contribution for these purposes. The question is, how much should each contribute?

Contrary to what some have claimed, it is my understanding that fixed and common cost recovery is not a significant problem in the payphone industry because, there, common costs are not very large. Most costs can be attributed directly to the appropriate coin or coinless service in a total service long run incremental cost study. Consequently, few payphone costs are truly common.

Further, those who advocate the top-down calculation, recognizing that the incremental costs of coin service are higher than those of coinless, if for no other reason, because of the collection costs of accumulated coin deposits and maintenance costs of the coin collection mechanism, concede that some deduction from the coin-call price is required to get at a suitable charge for coinless calls. But how large should that charge be?

The important point here is that there is no unambiguous *practical* answer. As Professor Hausman has indicated in one of his pieces of testimony, in theory the proper public interest price requires recourse to what are called Ramsey Pricing principles. These principles are well explored in the economic literature, but their rigorous use in practice has rightly been rejected repeatedly by regulators, because their use requires, among other things, constantly updated information on the demand elasticities for each pertinent service, a requirement that is surely unworkable in practice.

The conclusion is that the various short-cut deduction procedures that have been advocated by various witnesses must be regarded as a snare and a delusion. They do not meet the analytical requirements for efficient public interest pricing, and they are easily distorted to serve the special interest of the party that happens to advocate a particular procedure.

Consequently, the notion that top-down price calculations are inherently easier, more unambiguous and less contentious than bottom-up calculations must already be rejected as naïve. If done legitimately, the top-down calculations are every bit as complex, and at least as likely to give rise to contentious litigation as are bottom-up calculations, which have the clear advantage of greater transparency. But this will become still clearer when I turn next and finally to the testing of a proposed anchor for a top-down calculation of coinless-call fees.

How Can the Anchor be Determined or Tested Legitimately?

If current local coin-call prices are not set at anything like competitive levels, how can one go about determining an appropriate anchor for a top-down calculation? And if such an anchor is proposed, how can one go about determination of its legitimacy? I have already given some indications of the answer. There are several principles that clearly should be followed:

1. The price should equal or at least approximate the level one can expect to emerge in a market characterized by effective price competition.
2. This means that the price should correspond to the costs of suppliers.
3. These costs should be those of maximally *efficient* suppliers and should not be sufficient to cover the costs of inefficient firms, for otherwise the certain result will be wasteful supply operation and excessive prices to consumers.
4. The price for any of the services at issue should cover the corresponding cost of an efficient supplier.
5. However, in addition, the prices and the resulting revenues of all pertinent services together should permit an efficient firm to cover its fixed and common costs and provide a competitive return on investment.
6. The differences between the prices and the corresponding incremental costs should be determined in a way that does not impede the competitiveness of any of the firms affected.

This, clearly, is not a trivial list of requirements. Yet, it should be clear that if any of them is neglected the public interest will not be served well. Failure to meet these requirements threatens inefficiency in the industry, indefensibly high prices to consumers and weakening of competition. Surely no one will want to be responsible for such consequences.

The list also should make clear a second conclusion that I have already suggested. A legitimate top-down calculation is inherently indistinguishable from a bottom-up calculation, because both require painstaking examination of pricing in terms of the pertinent costs of an efficient supplier.

It is true that these difficulties can all be escaped by means of a specious *pseudo top-down calculation*, one that relies on assertion, assumption and unsupported rule-of-thumb short cuts in the computation process. But the result must be a procedure whose only virtue is computational simplicity, and which can lay absolutely no claim to provision of legitimate results.

That great student of the economics of regulation, Professor James Bonbright, used to tell of a drunkard who, having lost his wallet on 43rd Street, proceeded to search for it on 44th Street, because the light was better there. He always produced this tale when he was discussing short-cut calculation procedures such as the top-down procedures such as some of the parties here seem to advocate.

FCC Docket CC No. 96-128
Affidavit of William J. Baumol

I declare under penalty of perjury that the foregoing is true and correct.
Executed on July 27, 1998.

William J. Baumol

Certificate of Service

I, Rena Martens, do hereby certify that on this 27th day of July, 1998, a copy of the foregoing "Reply Comments of AT&T" was served by U.S. first class mail, postage prepaid, to the parties listed below.

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