WORKING
PAPERS

THE IMPACT OF ALTERNATIVE FORMS OF STATE REGULATION OF AT&T ON DIRECT DIAL LONG DISTANCE TELEPHONE RATES

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by

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I. Introduction and Summary

Federal and state regulatory agencies have traditionally used rate-of-return regulation to set profit levels and rates for utilities. For example, the Federal Energy Regulatory Commission and state Public Utility Commissions (PUCs) use rate-of -return methodologies to determine the prices of electricity. Likewise, the Federal Communications Commission (FCC) and state PUCs have traditionally used rate-of-return regulation to determine the prices of telephone service. Rate-of-return regulation, however, may not be the most efficient way to regulate the prices of a regulated utility. A "price cap" framework, in which the regulatory agency regulates only the maximum price, is an alternative to rate of return regulation. Under a "price cap" framework, the regulated utility has pricing flexibility since it can lower or raise prices as long as the prices stay below the cap.

Many states have recently adopted a price cap approach in their regulation of the intrastate telephone services provided by AT&T. In particular, states have been moving from standard rate-of-return regulation towards a price cap regulatory framework that allows AT&T to have pricing flexibility. Moreover, the FCC is currently considering switching to a price cap regulatory framework, in which the FCC would regulate only the maximum prices for AT&T's interstate basic service offerings.! There are reasons to suspect that pricing flexibility may result in lower costs to the firm, and therefore possibly lower prices to consumers. Alternatively, it may be that there is little difference between price cap and rate-of-return regulation, in which case prices arising from the alternative schemes should be similar.

Although there has been theoretical work comparing the two regulatory frameworks, there has, to date, been almost no empirical evidence comparing prices under a price cap regime with prices under traditional rate-of -return

1 See FCC Docket No. 87-313 (1987). Interstate basic service offerings include Message Toll Service (MTS), private line service (service owned by a firm and dedicated to its use), and other services. MTS is ordinary direct dial long distance service where the customer is charged based on the distance, time of day, and length of time of each call.

regulation. 2 This paper presents an attempt at estimating the effects of regulatory flexibility. In particular, this study presents an econometric analysis that compares the AT&T prices of intrastate, direct dial, long distance telephone service in states that allow AT&T pricing flexibility to those in states that do not. The results of this analysis suggest that AT&T Message Toll Service3 rates for daytime, evening, and nighttime/weekend services are all significantly lower in states that allow pricing flexi bili ty than in states that continue to use rate-of -return regulation.4

One explanation for these results is that AT&T's prices are lower in states that allow pricing flexibility because of the differences in the incentives to minimize costs and innovate under the alternative regulatory approaches. 6 An alternative explanation may be that AT&T fails to lower prices in states with rate-of-return regulation because of the difficulty AT&T foresees in raising them in the future. Under pricing flexibility, prices can be increased without approval as long as they are below the ceiling price.

The differences in prices do not appear to result from the imposition of very low price ceilings. If this were the case, we would expect that prices in most "price cap" states would be "bumping up" against the price ceilings. In fact, AT&T prices below the ceiling in approximately half of the states we surveyed. Moreover, AT&T's prices in these "below" ceiling" states are lower by a statistically significant amount than its prices in states that do not allow pricing flexibility. Additionally, AT&T is a proponent of "price cap" regulation, indicating that the ceiling prices are not set at unreasonably low levels. Also, the lower prices in states that allow pricing flexibility do not simply reflect a tendency for pricing regulations to be relaxed in states where prices were already low and for stricter regulation to remain in states with high prices. Our methodology allows us to control for this possibility, and we find that this effect is not significant.6

2 The Virginia State Corporate Commission (I987) examined the effect
of deregulation on AT&T pricing and has done a comparison survey of AT&T pricing in ten states.

3 Direct dial long distance service is also called Message Toll Service (MTS).

4 The evening and night rates probably apply most often to residential calls whereas the day rates probably apply most often to business calls.

6 These differences are discussed in Section II. These effects would have had to occur quite quickly since most states have only recently (early 1986) allowed pricing flexibility.

6 We control for this possibility by including the December 1983 price
in our regression analysis. If deregulation had occurred in states which had low prices prior to deregulation, then the inclusion of the December 1983 price (which is prior to all state deregulation efforts) would cause the relationship between pricing flexibility and 1987 prices to disappear. Since

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The telecommunications market is an extremely complex interaction of supply factors, demand factors, and political factors, all in an industry with quickly changing technology. Any single empirical model cannot incorporate all of these complexities. Consequently, we encourage more research and refinement of the models discussed in this paper to verify that the results we find are consistent with alternative data sources and alternative specif ica tions.

The study is organized into the following sections. In Section II we compare price cap regulation and rate-of -return regulation. In Section III we discuss the changes in regulation of AT&T at the state level. In Section IV we discuss the equation we use to compare the prices of intrastate long distance service across the different states. In Section V we discuss the econometric methodology used to estimate the equation. In Section VI we discuss the results. Section VII gives conclusions.

II. Price Cap Versus Rate-of-Return Regulation

The major advantage of the price cap approach is that it encourages
the utility to reduce its costs and to innovate in its production technology and service offerings by creating a greater profit incentive than exists under traditional regula tion. Under rate-of -return regulation, prices are set so that the utility is assured of a specific return on its investment after recouping its operating costs. Since(approach)Tj 0.9851 0 0 10.8 1s

Under the price-cap approach, however, the utility would be able to profit to a greater extent from cost-reducing innovations, since its rates would not be automatically adjusted downward. This incentive to innovate follows whether

III. State Regulation of AT&T

Long distance services are regulated not only by the FCC but by the states. The 1982 settlement of the Justice Department's suit against AT&T not only prevents AT&T from providing local service, but also restricts the ability of local companies to provide long distance service. Nevertheless, the total separation of local and long distance service was thought to be impractical. Therefore, Local Access and Transportation Areas (LA T As) were created within which the respective local telephone companies were allowed to provide long distance service. The creation of LA T As divided intrastate long distance service into two types, intraLAT A and interLA T A.11 Many states have reserved the intrastate intraLAT A service solely for the local telephone companies. The settlement of the lawsuit prohibits the local telephone companies from providing intrastate interLAT A service. However, many states have encouraged competition among long distance carriers in the provision of intrastate interLA T A service. 12

Many of the 39 states with more than one LATA regulate intrastate interLA T A carriers based on a distinction between dominant and nondominant

firms. IS Until recently, it was typical for the dominant firm to be subject to strict rate-of -return regulation, while the regulation of nondominant firms was less rigid. Usually, nondominant carriers simply filed tariff schedules which automatically took effect within a limited amount of time. The recent trend, however, has been away from this distinction and towards a relaxation in the regulation of the dominant firm(s). For example, between 1984 and 1987,28 of the 39 multiLATA states have relaxed their regulation of AT&T's intrastate interLAT A service. 14 For example, the Kansas Public Utility Commission permits AT&T to increase rates by four percent and decrease them by seven percent without filing a rate case. IS Missouri has recently adopted a minimum/maximum rate band structure within which all interLAT A carriers may change rates upon 14 days notice. The Missouri Public Utility Commission has ruled that the existing rates will be the maximum rates and that rates 15 percent below these rates determine a price floor. 16 The remaining II states continue to use rate-of-return regulation without pricing flexibility.

11 Thirty-nine states have more than one LATA. The United States is divided into 161 LATAs.

12 AT&T currently provides intrastate interLA T A service in all 39 multiLAT A states.

13 The states determine which firms are considered dominant and which are considered nondominant.

14 See State Telephone Regulation Report (1987). A description of the regulatory approach of individual states is contained in Appendix B.

15 Ibid.

16 Ibid.

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IV. The Empirical Model

A. The Reduced Form Model

There are two basic approaches for the empirical analysis of the price
of intrastate interLAT A long distance service: 1) the estimation of supply and demand equations for long distance service ("structural" equations); or 2) the estimation of a "reduced form" price model, which includes demand and supply factors in one equation. This paper is concerned not with the structural parameters of demand or supply,

tendency of the public utility commISSIOns to favor either consumers or shareholders in its pricing decisions. The reduced form model is given by equation (I).

where,

PRICEj = the August 1987 prices of intrastate interLA T A calls for the following ten mileage ranges for each sta te. 19

83PRICEj =

(0-10 miles)
(11-16 miles)
(17-22 miles)
(23-30 miles)
(31-40 miles)
(41-55 miles)
(56-70 miles)
(71-124 miles)
(125-196 miles)
(197-292 miles).

the December 1983 prices of intrastate interLA T A calls
for the same ten mileage ranges just listed for each
state.

REGFLEXi = a dummy variable which equals one if the state allows AT&T some regulatory pricing flexibility.20

The subscript i denotes the particular state, a and b1-b2 are coefficients to be estimated, and ej is a normally distributed error term with a homoskedastic and diagonal variance-covariance matrix.

Since the December 1983 1983

B. The Price Da ta

This paper focuses only on AT&T's toll rates for the 39 multiLATA states.22 Measuring the price of intrastate interLAT A service is complicated by the fact that the price of a phone call varies by time of day, distance
and length (minutes of use) of the call. For example, long distance
interLAT A rates are often 20-60 percent lower if made in the evening or on
the weekends rather than during daily business hours. Telephone companies
also set higher rates for the first minute of a long distance call than for
subsequent minutes of use. Moreover, long distance interLA T A rates vary
according to 0 0 10.7 456.61 615.132n030 13 Tm (long)T 45-9m (7Tm (are)Tj 36132n030 13 Tm (long

for both the 1987 tariff schedule and the 1983 tariff schedule.25 Appendix C contains the 1987 standardized prices for the first minute and additional minutes of an AT&T MTS phone call in each of the 39 muitiLATA states. 26

V. Econometric Methodology

We use an econometric method that allows us to use all of the price data for the different mileage bands in a single equation.

One way to estimate equation (1) would be to perform a regression for each of the mileage bands. However, a major disadvantage of estimating a separate equation for each mileage range is that we would have only 39 observations in each equation. Also, it is possible that a specific variable may have an effect on price that is insignificant for each mileage range and yet it might have this effect consistently across all mileage ranges. Further, statistical tests concerning the average price effect of any variable across the 10 equations (one for each mileage band) would require that we have independence across the residuals for the different price equations.27 Independence of the residuals across the equations may not be a reasonable assumption for this data. For example, what we do not explain for the 0-10 mile price (the residual in the 0-10 mile equation) of one state may be correlated with what we do not explain for the 11-16 mile price. To avoid this problem we use a technique used in many models that combine data across indi vid uals and over time for a single indi vid ual (time series-cross section models).28

Time series-cross section models are similar in structure to the type of reduced form model in this report. For example, in many time series-cross

25 Recall that one of the independent variables in the analysis is the 1983 intrastate interLATA toll.

26 We have a set of 10 different prices (which vary according to distance) for each state. The particular manner in which we utilize this price information is discussed in the econometrics section below.

27 If the residuals for each observation were independent of each other, we could test whether the average effect of a variable over all the 10 equations differed significantly from zero by summing the t-statistics from each ordinary least squares (OLS) equation and dividing by the square root
of the number of OLS equations. However, if the residuals are not
independent we need to turn to other methodologies to test the hypothesis
that states with pricing flexibility have different AT&T prices than states
without flexibility.

28 An alternative method, the seemingly unrelated regression
technique, is not appropriate i421 0 0 10 0 10.4 3511.0728 0 0 t1761(sta 0 10 0 198.25 Tm (pr Tm (

section settings we observe the earnings of a cross section of individuals for a variety of years. In these cases researchers often "pool" the data and analyze the cross section and time series data together in a single equation. In the model described above, instead of having observations over time for the same individuals we have observations over distance for the same states.

Borrowing from the time series-cross section models, we pool the data
for the different distances and analyze all of the data within a single equation. The data pooling may result in correlation among the error terms across different observations. There are numerous ways in which one can adjust the model so that the error term has the desirable statistical properties. The method used in this report is a variant of the covariance model. The covariance model allows each cross-sectional unit (in this case each state) and each time period (in this case each distance) to have its own dummy variable.29 Therefore, any similarities in the error term across two states for the same distance range will be incorporated into the respective dummy variable. Likewise, any similarities in the error term between two different mileage ranges for the same state30 will be incorporated into the dummy variables.31

The covariance model used in the analysis is given by equation (2).

(2) PRICEjj = a + b183PRICEjj + b2REGFLEXj + b3MILEI +

b4MILE2 + b5MILE3 + b6MILE4 +

b7MILE5 + bgMILE6 + bgMILE7 +

blOMILE8 + bllMILE9 + b12BOC2 +

where i denotes a state, j denotes a mileage range and

29 This is equivalent to adding a separate intercept term for each state and each mileage ra'nge.

30 Because the exogenous variables do not vary across the mileage
bands within a state, b2ach

we cannot identify the coefficients on the exogenous can5 247.21 Tm (a17

MILEj, j=I,9 are dummy variables for 9 of the 10 mileage ranges,32

BOCk, k=2,7 are

business hours, evening hours, and night\ weekend hours.34 We have estimated all the equations in linear form.35 Additionally, we have estimated all equations with and without the December 1983 price as an explanatory variable. The coefficient on the pricing flexibility variable in the model without the December 1983 price represents the difference in August 1987 prices between states that allow AT&T pricing flexibility and those that do not. The coefficient on the pricing flexibility variable in the model with the 1983 price included is similar to a model that compares the change in prices (since 1983) in states that have allowed pricing flexibility and those that have not.36

We first discuss the results for the equation for daytime rates (Table 2) with the daytime 1983 price included. The results demonstrate that after controlling for differences in the daytime 1983 price those states that have allowed AT&T some degree of pricing flexibility have significantly lower daytime prices than those states that maintain strict rate-of -return regulation. The coefficient on the regulatory flexibility variable equals -.10, indicating that after controlling for the 1983 price, a five minute call, on average, costs ten cents less in states that have allowed pricing flexibility.31 The average price of a five minute call in states that have strict rate-of-return regulation is $1.46. Therefore, on average, after taking account of

34 We have also estimated the equation using the price of a 15 minute
call and obtained very similar results.

35 We have also estimated the equation in a double logarithmic form (except for the dummy variables). The results using this model were very similar and consequently we do not report these results.

36 Note that all regulatory changes regarding pricing flexibility have taken place since 1984. Therefore, if states that have allowed

differences in 1983 prices, states with pncmg flexibility have approximately seven percent lower prices than those without flexibility.38

The coefficients on the dummy variables for mileage range are generally significant. After controlling for the 1983 price, the price of a 0-10 mile call, 11-16 mile call, 17-22 mile call, 23-30 mile call, 31-40 mile call, 41-55 mile call, 56-70 mile call and 71-124 mile call are all significantly cheaper than a call in the left out mileage range of 197-292 miles. The price of a 125-196 mile call is less, but not significantly less expensive, than a 197-292 mile call.

The particular regional Bell company has some systematic effect on
price in the regression.39 For example, ceteris paribus, states under Pacific Telesis (BOe5) have significantly lower prices for a given form of regulation

38 Some states have allowed AT&T to change prices within a specified band or change price as long as it is stays below a maximum price (see Appendix B for details). These types of pricing flexibility are precisely
the types being considered by the FCC. Other states have formally given
AT &T full pricing flexibility, but in some of these states the public utility commission retains the right to review (though not through formal rate cases) prices charged by AT&T and can prevent AT&T from implementing prices deemed anticompetitive. Consequently, for these states, it may be difficult to ascertain the degree of pricing freedom that AT&T actually haswefrom

than states under the regional

AT&T foresees in raising them in the future. Under pncmg flexibility, prices can be increased without approval as long as they are below the ceiling price.

Some alternative explanations are controlled for or can otherwise be ruled out by our study methodology. For example, there is evidence that lower prices in states that allow pricing flexibility do not simply result from the imposition of very low price ceilings. If this were the case, we would expect that prices in most deregulated states would be "bumping up" against the price ceilings. In fact, AT&T prices below the ceiling in approximately half of the nine states we have surveyed that impose price ceilings. Moreover, AT&T's prices in these "below ceiling" states are lower by a statistically significant amount than its prices in states that do not allow
pricing flexibility.

Also, the lower prices in states that allow pncmg flexibility do not
simply reflect a tendency for pricing regulations to be relaxed in states
where prices were already low and for stricter regulation to remain in states
with high prices. Our methodology allows us to control for this possibility,
and we fing358 0 0 10s520.8 Tm ( )Tj 0.05 Tc 11.412 0 0 58 0 0 10s561.75 508.8 T9.1023 0 0 1

Table 1
AYerage AT&T InterLATA Prices in States with ROR and States with Pricing Flexibility
(Daytime Rates for a 5 Minute Call)

ROR Regulation Price Flexibility

Distance 87 Price 83 Price Change 87 Price 83 Price Change
0-10 Miles $0.77 $0.61 $0.16 $0.70 $0.53 $0.17
11-16 Miles $0.91 $0.79 $0.12 $0.89 $0.74 $0.15
17-22 Miles $1.09 $0.99 $0.10 $0.99 $0.90 $0.09
23-30 Miles $1.27 $1.17 $0.10 $1.22 $1.16 $0.06
31-40 Miles $1.43 $1.39 $0.04 $1.32 $1.35 -$0.03
41-55 Miles $1.59 $1.61 -$0.02 $1.39 $1.51 -$0.12
56-70 Miles $1.71 $1.78 -$0.07 $1.59 $1.70 -$0.11
71-124 Miles $1.85 $1.99 -$0.14 $1.66 $1.85 -$0.19
125-196 Miles $1.95 $2.15 -$0.20 $1.80 $2.01 -$0.21
197-292 Miles $2.04 $2.28 -$0.24 $1.84 $2.12 -$0.28

16

Table 2
The Effect of AT&T Pricing Flexibility on the 1987 Price of a 5 Minute Direct Dial MTS Can During the Day
Variable �C�Q�e�f�f�i�~�i�e�n�t� �t�-�v�a�l�y�~�
Intercept 1.99 38.25**
83PRICE
REGFLEX -0.13 -4.62**
MILEI (0-10) -1.17 -21.89**
MILE2 01-16) -1.00 -18.65**

Table 3
The Effect of AT&T Pricing Flexibility on the 1987 Price of a 5 Minute Direct Dial MTS Call During the Evening Variable �~�Q�~�f�f�i�~�i�~�n�t� �t�-�v�S�!�l�u�~�
Intercept 1.41 37.3S**
S3PRICE
REGFLEX -0.13 -6.03**

MILEI (0-10) -0.S3 -21.20 ....
MILE2 (11-16) -0.70 -IS.07*'"
MILE3 (17-22) -0.61 -IS.77**
MILE4 (23-30) -0.47 -11.9S**
MILES (31-40) -0.3S -9.71**
MILE6 (41-SS) -0.32 -S.11 **
MILE7 (S6-70) -0.19 -4.S3 ....
MILES (71-124) -0.12 -3.19**
MILE9 (12S-196) -0.04 -0.95
BOC2 -0.01 -0.29
BOC3 0.12 3.94*'"
BOC4 -0.09 -2.13*
BOC5 -0.16 -3.56"'*
BOC6 0.12 3.53"'*
BOC7 -0.03 -0.S8

Adjusted R2 .73 F-value 67.96
N 390

* Statistically significant at .OS level.
** Statistically significant at .01 level.
18

� (�;�o�e�f�f�i�c�i�~�n�l� t-value
0.59 7.29**
O.5S IO.SS**
-0.10 -S.42 **
-0.23 -3.54"'*
-O.IS -3.0S**
-O.IS -2.S4*'"
-0.09 -1.93
-O.OS -1.79
-O.OS -2.12*
-0.02 -0.64
-0.02 -0.58
0.01 0.21
0.03 0.94
0.02 0.78
-0.06 -1.61
-0.11 -2.69**
0.09 2.83**
0.02 0.82

.80
91.04
390

Table 4
The Effect of AT&T Pricing Flexibility on the 1987 Price of a 5 Minute Direct Dial MTS Call During the Night\ Weekend Variable �C�Q�~�f�f�i�~�i�~�n�t� t-value
Intercept 0.96 30.00**
83PRICE
REGFLEX -0.06 -3.31**
MILEI (0-10) -0.57 -17.33"*
MILE2 (11-16) -0.49 -14.83 **
MILE3 (I 7-22) -0.43 -12.96**
MILE4 (23-30) -0.32 -9.80*'"
MILE5 (31-40) -0.26 -7.99**
MILE6 (41-55) -0.22 -6.70**
MILE7 (56-70) -0.13 -4.03**
MILE8 (71-124) -0.09 -2.64**
MILE9 (125-196) -0.03 -0.79
BOC2 0.05 1.59
BOC3 0.05 2.12*
BOC4 -0.11 -3.13*'"
BOC5 -0.09 -2.37*
BOC6 0.12 4.20**
BOC7 -0.04 -1.50

Adjs.013 Tc tem9 T5 (-0.04)Tj15

- 1.50 1ble70j 0.0016 T7412.993 j 03453 Tm (A2j2t 0 0 8.64 22.2534 0 0 1098 100.53 652.57

Appendix A

The more complete reduced form model is given

WAGE

ACCESS

CPI

ENTRY

= the average wage per employee in the telecommunications industry for each state in 1984,

= a dummy variable that equals I if the state, since 1983, has lowered its access charge for intrastate long distance carriers
to connect to the local network.

= a measure of the 1986 consumer price index for state i."3

= a dummy variable that equals 1 if the state restricts
reseUers or facilities-based competition for intraLA T A toll
service.

The variables in equation (AI) can be classified as those which affect
the demand for interLAT A service, those that affect the input costs of providing interLAT A service (supply) and those variables that proxy the political environment of the PUC.""

While most of these variables are included for obvious reasons, we discuss three of these in more detail. The percentage rural, the access charg4e ieronment

greater in the more inclusive model) to the results that are presented in the text. For

Table A1
The Effect of AT&T Pricing Flexibility on the 1987 Price of a 5 Minute Direct Dial MTS Call During the Day
Variable �~�Q�~�f�f�i�~�i�~�n�t� �t�-�v�a�l�y�~�
Intercept 2.32 4.69··
83PRICE 0.37 7.59**
REGFLEX -0.15 -4.97"*
PRURUAL -0.01 -3.11 "'*
POPULATION -0.12 -4.65**
SALOMON

BOC4 0.13 1.98*

BOC5 -0.30 -3.57**

BOC6 0.13

BOC7 0.08

Adjusted R2 .85

N 390

* Statistically significant at .05 level.
** Statistically significant at .0 I level.

2.78**

2.04*

24

Appendix B

How States Have Relaxed Regulation of AT&T Intrastate Services

The following descriptions are taken directly from the June 18, 1987 issue of State Telephone Regulation Report. State regulatory schemes can be divided into three categories, two of which are represented in the list below. First, states that are not listed below are those with strict rate-of -return regulation. In these states, AT&T must file a rate case to lower or raise its rates. Second, in states with price bands or price caps, AT&T can lower or raise its rates within the allowed range without a rate case. In these states, AT&T almost always must file a rate case in order to implement a rate outside of the authorized range. However, the price ranges or price caps are set by the public utility commissions. Consequently these states are still considered, in part, rate-of -return regulated though less strictly so than the states not listed in this table since states not listed require formal rate
cases in order to change any rates. Third, for states with full pricing
flexibility, the state forbears from rate-of-return regulation.

Arizona -- Oct. 1985: Banded rates, floor at 50 percent of cap; 14 days
notice to change rates within band. New services require prior state
approval. Rate of return regulated.

Colorado -- Nov. 1985: Minis regulated. 311.req.1479 0 0 1suppor 482.89 T08(listed)Tj 1 Tc.2

Maryland -- Sept. 1986: Full pncmg flexibility; 14 days notice required to change rates. New services take effect 14 days after filing of tariffs, unless opposed. Geographic deaveraging explicitly banned. State forbears from rate of return regulation.

Michigan -- May 1986: Flexible rate of return, anything below 15.6 percent return on equity is permissible. MTS and WATS rates can vary up to 10 percent below ceiling this year and up to 15 percent below in 1988. New services need prior state approval.

Minnesota -- June 1987: Services classified as effectively competitive, emerging competitive, or non-competitive, upon petition to PUc. First category requires notification to PUC and customers; second requires

rate case. New services require prior state approval. Current authorized return on equity set between 14 percent and 15 percent.

North Carolina -- Feb. 1985: Rate caps only, no floor; 14 days notice required for rate changes; AT&T's cap is cap for all carriers. New services require prior state approval. Current authorized return on equity is 14.5 percent.

Ohio -- April 1985: Banded rates, floor set at 50 percent of ceiling; 20 days notice required for rate changes within band. New services take effect on 45 days notice, unless opposed. State forbears from rate of return regula tion.

Oklahoma -- July 1985: Rate changes or new services take effect 30 days after filing unless state orders suspension; geographic deaveraging explicitly banned. State has eliminated rate of return regulation.

Oregon -- Nov. 1986: Rates for a service can be anywhere between marginal cost and state-set cap; one day notice of rate changes. New services take effect 30 days after filing of tariffs, unless opposed. Rate of return not regulated.

Pennsylvania -- Aug. 1985: Rate changes that amount to less than 3 percent of gross revenues or affect less than 5 percent of customers normally require no state review; 30 days notice of rate changes or to launch new services. Individual services must be priced above cost, with state requiring 30 days advance notice of cost changes. Rate of return not regulated.

South Carolina -- Aug. 1984: Rate caps only, no floor; 14 days notice required for rate changes. Rate of return not regulated as of January 1987
but rate caps continue in effect.

Tennessee -- April 1985: Rate caps only, no floor, 30 days notice required
for rate changes. New services require prior state approval. Current
authorized rate of return on equity is 14.5 percent.

Texas -- March 1987: Service-specific banded rates for MTS, WA TS, analog
private lines and digital private lines were set to behm (is)Tj -01.1 0 0 11.11.1 426.71 3m (fo

Appendix C

1987 AT&T Intrastate InterLATA Direct Dial MTS Rates (Day

Appendix C - Continued

1987 AT&T Intrastate InterLATA Direct Dial MTS Rates
(Day Rates)

Distance

23-30 miles 31-40 mites 41-55 miles

State First AruL First AruL First Add.
Alabama $0.42 $0.30 $0.45 $0.33 $0.48 $0.36
Arizona $0.33 $0.16 $0.38 $0.21 $0.43 $0.25
Arkansas $0.31 $0.24 $0.38 $0.28 $0.41 $0.33
California $0.32 $0.19 $0.32 $0.19 $0.34 $0.20
Colorado $0.34 $0.22 $0.34 $0.22 $0.34 $0.22
Connecticut $0.42 $0.19 $0.47 $0.22 $0.52 $0.28
Florida $0.40 $0.27 $0.40 $0.27 $0.40 $0.27
Georgia $0.31 $0.19 $0.35 $0.22 $0.43 $0.28
Idaho $0.36 $0.25 36 $0Iow9.77 Tm ($0.32)Tj 0.0284 Tc 3.23 0 244.d ($0.2Tj -14($0. $0.40 .707 0.021 Td ($0.34)Tj 0.0284 Tc 3d ($0.15Tc30.22

Arizona56ut $0.40 .707 0.021 T5Tc 7.716 -0. $07.716 -0. $.40 0 10.7 Connecti15t $0.24 $0.488 Georgia na563j 0.034 Tc 10.01 2655 T51 0 North.0052ona5305

Appendix C - Continued

1987 AT&T Intrastate InterLATA Direct Dial MTS Rates (Day Rates)

Distance

197-292 miles

State First

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