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DIFFERENCES BETWEEN THE LEVELS OF SPOT AND NETWORK TELEVISION

ADVERTISING RATES

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Differences Between the Levels of Spot and Network Television Advertising Rates

John L. Peterman*

Ι

In a recent paper, Porter (1976) states that the debate on network television discounts has overlooked the

distinct cost advantages to advertising via the network versus utilizing spot advertising. Network rates range from approximately 10 to 70 percent of the sum of the individual station [spot] rates, with the discount varying by time of day and season. This means that a potential entrant cannot effectively utilize spot advertising in a limited area to counter network advertising by going firms (p. 403).¹

That is, if entry occurs on substantially less than a national scale and spot television is purchased to counter the network advertising of existing (national) firms, the entrant faces higher spot than network rates; and if network advertising is purchased to secure lower rates, waste circulation is obtained. So the entrant's cost of advertising (per unit of output) will exceed that of existing firms. Presumably, under these conditions, entry might be expected on a larger scale. But Porter argues that except for advertising, entry on a larger scale will on balance cost relatively more than entry on a smaller scale. Porter expects higher rates of return in those industries which rely importantly on network advertising, since the costs of entrants into them are high relative to the costs of existing firms. In general, this effect, previously thought to stem from discounts, is now thought the result of a differential between spot and network rates.

Porter supports his position with regression estimates of profit rates across 39 consumer goods industries. Each equation contains a different advertising variable.²

For the full sample . . . of industries, replacing A/S [advertising as a percent of sales] with NET/S [network advertising as a percent of sales] increases the size and significance of the coefficient of advertising and the corrected R2 of the equation NATL/S [the sum of network and magazine advertising as a percent of sales] yields results slightly inferior to A/S. Introducing the ratios for other media singly, additively, or in interaction form yielded insignificant (and sometimes negative) coefficients (p. 405).

He concludes

that the elevation of market power due to advertising is primarily due to the size of advertising outlays on network television and magazines, especially the former The requirement of matching competitors outlays on [other] media puts entrants at no serious disadvantage which would yield going firms market power (p. 405).

The significance of network advertising is attributed primarily to differences between spot and network rates. But in looking at the issue in greater detail, the differences in rates appear much smaller than the range Porter suggests. The implication is that Porter's regression results may in large part stem from other factors. Aspects of the network rate structures in light of which Porter's estimate of the rate differences is discussed are presented in Part II. Other estimates are given in Part III.

II

Porter's estimate is based on the network rate structures for program time (time during which the advertiser presents a

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program containing his commercials). These structures differ from those for participations (units of commercial time normally of 30 or 60 seconds within network programs), although of course there are important similarities between them. During the time covered by Porter's regressions, probably over 80 percent of the networks' revenues were derived from participations, the balance stemming only in part from sales of program time. Beginning in 1966, the networks adopted rate structures in which the prices of program time were directly varied by time of day and season. These structures (on which Porter bases his estimate of the differences between spot and network rates) have continued although with minor variations up to the present time.

To understand these structures, it is necessary to examine the audiences generally available to view programs. These audiences, defined here as the proportion of households using television, change in definite and systematic ways and the broad patterns, although subject to modification over time, have endured for many years. In general, the proportion of homes using television at any particular time between noon and midnight remains relatively stable from late September to about mid-April, at which time the proportions fall, continuing at these lower levels through May; then the proportions fall again, but primarily for programs broadcast between 6 and 11 p.m. and remain consistently at these levels through June, July, August, and early September. Therefore, as a general rule, the proportion of homes viewing a program would depend upon the months

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during which it is broadcast. Secondly, the proportion of homes reached by television remains relatively stable from noon to 5 p.m., after which audiences rise rather sharply, reaching a peak between 9 and 10 p.m., and then fall off to midnight. The available audiences, therefore, depend upon the time of day during which programs are broadcast. The nature of these audience changes are shown on average for 1976 and 1977 in Illustration 1.

The variations in network rates by time of day and season correspond closely to the variations in audience size. Consequently, the changes in rates equalize approximately the cost per unit of available audience to buyers of different times of the day or within different seasons. For example, in 1977 network hourly rates from noon to 5 p.m. throughout the winter, spring, and summer seasons average 42 percent of the networks' highest hourly rate (from 9 to 10 p.m. eastern time during the winter season). The corresponding hourly proportion of homes using television averages 45 percent of the highest hourly proportion (again from 9 to 10 p.m. during the winter season). The ratio of these percentages (.94) indicates that the reduction in afternoon relative to highest evening rates conforms quite closely to the corresponding reduction in homes using television.³ Similar ratios of hourly network rates from 6 p.m. to midnight expressed as a percentage of the networks' highest hourly rates to the corresponding hourly proportion of homes using television are given in Table 1 for NBC and CBS for the winter, spring, and The figures in parentheses include ABC which in summer seasons.

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Time of Day

ILLUSTRATION I

Homes using Television as a Percent of Highest Average Proportion of Homes Using Television by Time of Day and Season of Year (1976 and 1977)

Source: See Table 1. Highest hourly proportion of total homes reached on average during Jan. - March, Sept. - Dec. (the winter season), 1976-1977 is set equal to 100, and average homes reached at other hours during this period and during April - May (spring season) and June - Aug. (summer season) are expressed as percentages of this highest proportion. 1977 did not vary its published rates by season.⁴ The average of the ratios weighted by length of season is .97 for NBC and CBS. Including ABC, the average is 1.01. If hourly rates remained at their highest level throughout the evening and year, the ratios in Table 1 would range from 1.00 to 1.72 and would average 1.27.

In setting out the prices of program time, the networks publish a "base" rate for each affiliated station and the prices for particular times of the day or within different seasons are expressed as percentages of the base rates of those stations included in the buyer's order. For example, the rate from 6:30 to 7 p.m. on NBC during the winter season is currently 54 percent of base rates; and from 9 to 9:30 p.m., 77 percent. These percentages fall to 44 and 69 during the spring season and to 40 and 61 during the summer. Morning and afternoon prices are derived using percentages below those applicable during the evening.

In making his estimate of the relative cost of network and spot advertising Porter apparently assumed that the networks' base rates are the stations' spot rates; and the network rates which he compares with them are the rates which result when the various percentages are applied to the base rates. These percentages range from about 10 to 70, so Porter concludes that network rates range from 10 to 70 percent of spot rates. But in fact they are all network rates; and the bulk of the variation in them simply accounts for time of day and seasonal differences in

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Table 1

Ratios of Average Hourly Network Rates as a Percentage of Highest Average Network Rates to the Corresponding Percentage of Homes Using Television, 1976-1977.

	a and also also also also also also also also				f ning yang dika bin jini kana yakan kata kata ma	
			Time of	E Day, P.M.		
Season	6-7:00	7-8:00	8-9:00	9-10:00	10-11:00	11-12:00
Winter	.86(.89)	.93(.95)	1.00(1.00)	1.00(1.00)	1.02(1.04)	.98(1.02)
Spring	.89(.98)	.97(1.06)	1.02(1.08)	.97(1.02)	1.00(1.01)	.99(1.02)
Summer	.87(.98)	.93(1.08)	1.04(1.17)	1.03(1.10)	1.00(1.09)	.93(1.00)

Source: Network rates are from Network Rates and Data, January 10, 1978. The proportion of homes using television by hour and season is from Nielsen National Television Ratings, Television Usage, Estimates of Homes by Hours, Bi-Monthly, 1977. The winter, spring, and summer seasons are defined as in NBC's rate schedule.

audience size. So what is said to be a comparison between spot and network rates is really not.

Over the years, stations have published their spot rates for program time, although at present most stations do not, presumably because sales of this time are unimportant. Throughout the 1960's, spot rates varied substantially by time of day, less so by season, although given the relatively small proportion of revenues derived from program time, seasonal variations might have occurred in other ways. To discover whether this was so would require a sample of actual transactions which we do not have. Such variations in spot rates mean that they do not always equal the networks' base rates. In January 1966, the sum of the networks' base rates for a sample of 150 stations (50 stations drawn from each network) for the purchase of the hours between 9 and 10 a.m., 2 and 3 p.m., and 9 and 10 p.m. equals 97 percent of the sum of the stations' spot rates for the same periods of time, suggesting that spot and network rates for program time are similar.⁵

Secondly, the networks' base rates are hour-rates whereas the percentages applied to them result in half-hour rates. For example, the rates of NBC and CBS from 7:30 to 8 p.m. during the winter season average 70 percent (and from 8 - 8:30 p.m., 78 percent) of base rates. Porter assumes that each percentage expresses a difference between network and spot rates, i.e., that network rates are 70 or 78 percent of spot. However, if the hour from 7:30 to 8:30 p.m. were purchased, the networks' rates would

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equal 70 plus 78 or 148 percent of base rates. If spot rates equal network base rates as Porter assumes, then it would seem that network rates exceed those of spot. But if they do, it cannot be discovered in this way, since the comparison would still involve only different network rates.

III

The estimate of network rates presented below is based on sales of participations. The prices of participations are specified for each program series and vary in relation to the size of audience advertisers expect to reach, so they vary with the popularity of particular programs and by time of day and season. As in the case of program time, variations in the prices of participations equalize approximately the cost per unit of audience reached by network advertisers.⁶

Several studies (Blank 1968; Peterman 1968; Comanor and Wilson 1974; Peterman and Carney 1978) have shown that the prices of participations do not appear to vary in relation to the size of buyer. This is so whether size is measured by total expenditures on network television or on individual networks. Furthermore, the published discounts for participations are comparatively small and in 1966 averaged between 2 and 4 percent for the purchase of 26 minutes broadcast on alternate or consecutive weeks on the same program series. Only about 5 percent of the total number of minutes purchased by all advertisers on a large sample of programs appeared sufficient in terms of quantity to qualify for these discounts, suggesting that buyers may generally

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find that the advantages from spreading their purchases throughout the broadcast schedules exceed the price reductions possibly achieved by confining their purchases to fewer programs.⁷

From the program sample described in Fn. 7, the prices per minute participation and the number of homes reached were obtained for each buyer on each series. The mean price per minute is \$32,313 or \$2.93 per 1,000 homes reached.⁸ This figure, given the absence of substantial discounts and differences in price according to the size of buyer, is assumed a reasonable indication of the price (hereafter cost per 1,000) generally charged network advertisers.

Station spot revenues are derived primarily from participations on station programs and commercial time between programs.⁹ Estimates of spot costs per 1,000 are based on a sample of 197 stations (two stations being selected, so far as this was possible, from each market containing three or more stations). The average price per minute announcement from 7:30 -11 p.m. (or from 6:30 - 10 p.m., depending on time zone) in February 1966 and the average number of homes reached (per quarter hour) during this time were obtained for each station and converted into estimates of the cost per 1,000. Estimates were made for the purchase of 1, 3, 5, and 10 announcements per week. Each purchase was assumed nonpreemotible: i.e., each minute is firmly held by the buyer. Estimates were also made allowing for preemption: each minute is held by the buyer unless the station is offered the higher, nonpreemptible rate, in which case

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the original buyer may retain his position by paying the higher rate. These estimates are presented and compared with the network average in Table 2. 10

A comparison of rows a. and b. of Table 2 indicates that the two sets of estimates differ only slightly. Since the latter tends in character to approach a network purchase, the following comments are based on the ratios of spot to network costs appearing in row d.

These ratios range from 1.18 to .87 and depend on the number of minutes purchased and the type of contract entered.¹¹ Unfortunately, without information on the frequency with which buyers make the various spot purchases, it is difficult to summarize the differences between spot and network, although it is clear that in general the situation is quite different from that portrayed by Porter. If all purchase options are given equal weight and if it is assumed that all buyers reach the stations' average audiences, then the differences in rates might be summarized by the average of the ratios, which it so happens equals 1.00. The average excluding the extremes (of one minute nonpreemptible and 10 minutes preemptible), assuming that these purchases occur relatively infrequently, is .99.

I note however, that certain of the spot estimates in Table 2 may more closely approximate than others the average cost per 1,000 buyers actually incurred, in which case the closer approximations would be more relevant for comparison with the networks.

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Table 2

		Minutes Per Week								
		11	lbnpreemptible				Preemptible ^a			
		1	3	5	10	1	3	5	10	
а.	Mean Cost per 1,000 per minute per station	\$3.52	3.22	2.99	2.83	3.02	2.78	2.62	2.84	
b.	Sum of Station Minut Kates/Sum of Homes (in 1,000's)	e- \$3.46	3.18	3.01	2.83	3.00	2.79	2.65	2.54	
c.	How a./\$2.93 ^b	1.21	1.10	1.02	.96	1.04	.95	.89	.85	
d.	Row b./\$2.93 ^b	1.18	1.09	1.03	.97	1.02	.95	.90	.87	

Spot Television Costs per 1,000 Homes and Ratios of Spot to Netork Costs, 1966

Source: Homes reached by each buyer on each network series are from Nielsen Television Index, Program Analysis, Total Audience Rating Nielsen Co., Bi-Monthly 1966) and LNA/BAR, Sec. 1, Station Line-ups, September and November 1966). Prices paid per minute by buyer by network series are from LNA/BAR, Sec. III, November 1966. Spot rates are from Spot Television, rates and Data, February 15, 1966. Average homes reached per quarter hour by station are from American Research Bureau, Research Report: Day-Part Television Audience Summary (February/March 1966). The sources listed here and in Note 7 were used for the estimates in b. below except that they cover a comparable period in 1965.

^a Stations frequently had several provisions for preemption. If so, highest preemptible rates were used to estimate costs. For stations without provisions for preemption, nonpreemptible rates were used.

^b Comparable ratios for 1965 estimated from 42 network series and and 188 stations are for row c: 1.26, 1.16, 1.11, 1.05, 1.12, 1.03, .95, .93; for row d: 1.14, 1.06, 1.04, 1.00, 1.04, .96, .92, .87. The row d. ratios average about the same as in 1966; the row c. average exceeds that in 1966 by about 7%, suggesting that the cost per 1,000 is somewhat higher in smaller markets (although this was not the case in 1966). The row d. ratios based on a sample of 33 stations (drawn from markets containing 2 stations) are approximately equal to those reported above for 1966. On average, these stations reached smaller audiences than did those contained in the sample of 197 stations. Almost all sample stations are network affiliates and therefore carried network programs. Since the size of audience reached by these programs substantially vary,¹² it would seem that station audiences would similarly vary. But station rates appear much less flexible than the networks'. Stations may have only one or two rates in effect from 7:30 to 11 p.m. (assuming a given number of minutes and specified contract terms) whereas the networks will have a different price corresponding to each program and the audience it is likely to reach. One wonders, therefore, whether the provisions for preemption and the discounts based on the number of announcements broadcast in one week (which are absent from the network contracts) are not themselves, at least in part, means by which the stations have increased the flexibility of their prices to correspond more closely to differences in the size of audience and therefore in the value of time.

Consider a buyer of one nonpreemptible minute per week. Presumably, he would try to purchase time when the expected audience is larger than the station's average; and if he were only willing to pay the higher rate most stations charge for this purchase unless in fact he reached a larger than average audience, he would be successful. Consequently, the cost per 1,000 reported for such buyers in Table 2 may be too high, since the estimate is based on each station's average audience, whereas these buyers may generally reach audiences larger than this. Alternatively, suppose the buyer purchases 5 or 10 announcements per week. He might then wish to spread his purchases throughout

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the broadcast schedule, reaching different groups of viewers and at different times of the evening. As he does so, some units of time are apt to reach smaller audiences than are others. But the buyer may be willing to purchase them if the station grants a discount, which most do. In general, if these buyers reach audiences closer to the average than do buyers of a smaller number of minutes (and who therefore pay higher rates), then the discounted purchases would approximate more closely the cost per 1,000 actually incurred by spot buyers and would be more relevant for comparison with the networks'. The ratios for the 5 and 10 nonpreemptible units per week average 1.00; and for the 3, 5, and 10, 1.03.

The provisions for preemption might also be explained along similar lines. A buyer of one preemptible minute might pay a lower rate in part because the time he obtains reaches approximately the station's average audience; for it seems likely that if his announcement were to reach an audience substantially above the average, the time would be preempted by buyers offering the higher, nonpreemptible rates. If so, the cost per 1,000 for the purchase of 1 (or perhaps 3) preemptible announcements may correspond quite closely to the cost per 1,000 typically incurred by spot buyers. From Table 2, spot costs for these purchases are close to the network average. On the other hand, the purchase of 10 preemptible announcements (for which station costs are about

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13 percent below the networks') may be biased downward--for, in general, these buyers may reach audiences below the average. If this were not the case, then the time might be worth preempting.

Some support is provided by a group of stations which have followed the networks' practice of directly varying the prices of the various units of time offered.¹³ Forty-eight of the sample stations had rate structures of this type. For this group, the ratios of spot to network costs are listed below:

		Nong	preempti	ible		Preemptible			
		l	3	5	10	1	3	5	10
a.	Mean cost per per minute tation/\$2.93	1.10	1.04	.99	.95	.97	.92	.89	.84
Ъ.	Sum of station rates/sum of homes (in l,000's)/\$2.93		1.03	1.00	.97	.98	.95	.92	.89
	The differenc	es betw	veen spo	ot and n	etwork a	are gene	rally s	maller	
	than these in Table 2. 14 The reductions are most pronounced								
for the purchase of 1 and 3 minutes nonpreemptible which might $ au$						be			
expected if the use of the stations' average audiences under- estimated the true audiences and therefore biased upward the sp					nder-				
					ot				
	costs reported in Table 2 for these purchases. Similarly, spot								
	costs rise (a	lthough	n slight	tly) for	the 5 a	and 10 p	reempti	ble pur-	-
	chases, so th	e exter	it to wh	nich spo	t is les	s than i	network	diminis	shes.
	As is evident	, for m	nost of	the pur	chase op	otions,	spot an	d netwoi	ck
	costs differ	only sl	ightly.						

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It is not known whether minute announcements are distributed evenly throughout the period 7:30 - 11 p.m. If confined to the fringes of this time, when audiences are below the average from 7:30 to 11 p.m., then the spot estimates reported above would understate the situation actually confronted by buyers. To account for this possibility, spot costs were derived using the stations' average rates from 7:30 to 11 p.m. and the homes reached during various fringe time-periods.¹⁵ It was previously noted that the average of the ratios in row d. of Table 2 equals 1.00. The average of the ratios if spot costs are instead based on the homes reached during various fringe periods are listed below:¹⁶

Time Period	Average of the ratios of spot to network costs per 1,000
7:30-8 p.m. & 10-11 p.m.	1.04
7:30-8 p.m. & 10:30-11 p.m.	1.08
7 to 7:30 p.m.	1.10
6:30 - 7:30 p.m.	1.15
6:30-7:30 p.m. & 10:30-11 p.m.	1.17
As one moves from the daily period	ds of peak viewing, audiences
fall, so spot costs rise relative	to the networks'. But as one
moves to the extremes, the estimation	tes become less plausible
because in fact most stations have	e lower rates from 6:30 to 7:30
p.m. and from 10:30 to 11 p.m. that	an the average from 7:30 to ll

p.m. And it is the average on which the above estimates are based.¹⁷

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To sum up, it appears that the differences between rates are far smaller than the range suggested by Porter. ¹⁸ Therefore, the significance of the relationship between network advertising and industry profits which Porter attributes to a difference in rates may stem from other factors. Perhaps industries that are local or regional in character (and which therefore rely on local media) have higher rates of depreciation of advertising than do national industries, so that the failure to capitalize rather than expense advertising improves the coefficient of network advertising; or expenditures on local compared to national media may involve greater measurement error, so that the coefficients of Porter's variables which include the former are biased toward zero; or firms producing more successful brands or which are generally more efficient may be more likely to distribute over very wide areas and therefore rely relatively more on network television, so that profit rates are more closely associated with network advertising than with that in other media. What does seem clear is that Porter's conclusion that his "preliminary results suggest that social limits in advertising may be relevant to network television ... " is yet to be supported by substantial evidence.

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FCOTNOTES

* Economist, Federal Trade Commission. The views are the author's and should not be construed as representative of the views of the FTC staff or individual Commissioners. I am grateful to Charles Keithahn, J. Howard Beales, and Addie Williams for their help. A revised version of this paper is forthcoming in <u>The Journal of Business</u>

¹ The rates to which Porter refers are for time unadjusted for audience size.

² Besides advertising, the independent variables in each regression are the 8-firm concentration ratio, minimum efficient scale as a percentage of industry sales, industry growth, a dummy for local or regional industry, and absolute capital requirements for production at minimum efficient scale. Industry profit rates are estimated for 1963-1965; the advertising variables are based on 1967 data. Porter's estimate of the difference between spot and network rates apparently refers to the mid-1970's. The network rate structures existing at that date correspond closely to those existing in 1967.

Afternoon rates fall somewhat more than in proportion to homes. This is probably related to the fewer adult viewers per home reached during the afternoon, although the effect of this is mitigated at least in part by the larger proportion of commercial content permitted in afternoon programs.

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⁴ It is not clear why ABC does not vary rates by season. Its practice here differs from that followed in the sale of participations for which seasonal reductions in price have occurred. It would seem that ABC would have difficulty selling time during the spring and summer season. But ABC has traditionally sold little program time; and buyers who wish it might negotiate lower rates.

⁵ Comparable results emerge for the purchase of longer periods of daily time. Network Rates and Data, January 10, 1966; Spot Television, Rates and Data, January 15, 1966; Hearings on S. Res. 191 before Subcomm. on Antitrust and Monopoly of the Senate Comm. on the Judiciary, 89th Cong., 2d Sess., pt. 2, at 304-13, 328-30, 392-93 (1966).

⁶ In 1966, spring and summer average prices per minute participation and the average number of homes reached by network programs expressed as a percentage of their winter averages within two broad periods of daily time are listed below:

	Noon to 5:00 p.m.		7:00 to 11:0	0 p.m.				
******	Spring	Summer	Spring	Summer				
Homes Reached by Network Programs	92.4	88.5	85.7	72.3				
One-time Participation Prices	n 89.7	86 .7	83.3	68.3				
The observations for prices and homes from noon to 5 p.m. are								
averages for all program series broadcast January to September								
1966; from 7 to 11 p.m., averages for 50 participating program								
series broadcast October 1965 to September 1966. Average day-								
time prices are substa	antially bel	ow evening	prices. For	sources				
see table 2.								

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⁷ The sample refers to 48 program series broadcast during 1966. An equal number of series was randomly selected from each network from the total of all regularly scheduled participating program series broadcast during January-November 1966 as listed in LNA/BAR, Sec. I, Station line-ups, September and November 1966. I estimate that the selected series contain between 60 to 70 percent of the broadcast hours between 7:00 to 11:00 p.m. sold at least in part on a participating basis, excluding all special or nonregularly scheduled programs. Participations were purchased by 169 different advertisers on the selected series.

The mean cost per 1,000 for each advertiser per minute broadcast during the winter season equals about \$2.89.

The proportion of spot revenues derived from these sources is not known precisely, although it is often thought to exceed that which the networks derive from participations.

¹⁰ Both the network and spot estimates are based on published rates.

¹¹ Spot costs would be somewhat lower if the stations' lowest preemptible rates were used in making the estimates. In general, the purchase of 10 units per week yields approximately the stations' maximum quantity discounts.

¹² The mean number of homes reached per minute per buyer on each network series equals 11.3 million, the standard deviation being 3.5 million. The mean price per minute per buyer on each series is \$32,313, the standard deviation being \$8,610.

¹³ In general, these stations have adopted grids which specify various prices applicable at particular times of the evening for each day of the week.

¹⁴ This is more pronounced when the 48 stations are compared with all remaining stations, for which the row d. ratios are: 1.22, 1.11, 1.04, .96, 1.04, .95, .89, .85. The range of these ratios is about twice that for the group of 48 stations.

¹⁵ It was assumed that changes in the proportion of homes using television by time of day for the sample of stations equal the national averages. Then if, for example, the average audience from 7:30 to 11 p.m. is 100, the audience from 10:30 to 11 p.m. would be 87 and from 6 to 6:30 p.m., 74.

¹⁶ Spot estimates were also made for nonpreemptible purchases of 1, 3, 5, and 10 minutes using average rates and homes over the period 5 - 7:30 p.m. (or 4 - 6:30 p.m., depending on time zone), a period during which it appears that the networks use a smaller proportion of the total available time. These estimates are approximately 10 percent below those in row a. and 15 percent below those in row b. of Table 2.

¹⁷ Published spot rates do not appear to vary by season as much as network rates, although it may be that substantial variation is achieved by selling different proportions of time at preemptible or discounted rates. To discover whether this is so would again require a sample of actual transactions. There seems little reason to suppose that the relationship between spot and network rates would vary substantially by season.

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18 Assume that the total amount of time is fixed (as seems approximately the case) and that stations supply a given proportion of it for network sales (the balance being sold as spot). Rates per 1,000 homes need not be the same in each market because the demands for time may differ. The demands may differ because spot and network differ in terms of consumer responsiveness to commercials and the buyers' costs of transacting for time or producing and distributing commercials. The media may also differ in the flexibility of their use. No doubt a difference in rates would affect the amount of time supplied to each market. But the stations' net receipts need not be maximized when rates are equal, for the costs of sales and of producing audiences may differ between markets, as might the elasticity of demand for time. The contracts dividing the receipts from network sales would also influence the outcome. It is hard to believe, however, that network rates could fall to as little as 10% of spot without buyers increasing their demand for network (and contracting that for spot) and without stations decreasing the time devoted to network sales, so that the differences in rates would substantially diminish.

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