TABLE 2

Broadcast revenues, expenses and income of television networks and stations, 1972-1973 (in millions of dollars)

	1973	1972	% increase 1972-1973
Broadcast revenues [1]			
3 networks	$1,404.9	$1,271.3	10.5
15 network owned-and-operated stations	353.1	327.1	7.9
All other stations			
474 VHF [2]	1,497.4	1,395.6	7.3
177 UHF [3]	209.4	185.4	12.9
Subtotal	1,706.8	1,581.1	7.9
INDUSTRY TOTAL	3,464.8	3,179.4	9.0
Broadcast expenses			
3 networks	$1,220.0	$1,160.4	5.1
15 network owned-and-operated stations	250.3	224.6	11.4
All other stations			
474 VHF [2]	1,124.3	1,040.9	8.0
177 UHF [3]	217.0	201.4	7.7
Subtotal	1,341.4	1,242.3	8.0
INDUSTRY TOTAL	2,811.7	2,627.3	7.0
Broadcast income (before federal income tax)			
3 networks	$ 184.8	$ 110.9	66.6
15 network owned-and-operated stations	102.8	102.5	0.3
All other stations			
474 VHF [2]	373.1	354.7	5.2
177 UHF [3]	(7.7)	(15.9)	—
Subtotal	365.4	338.8	7.8
INDUSTRY TOTAL	653.1	552.2	18.3

[1] Net, after commissions to agencies, representatives and brokers, after cash discounts.

[2] The 474 VHF stations represent 496 operations including 22 satellite stations that filed a combined report with their parent stations. The 1972 data reflect 475 VHF stations representing 493 operations including 18 satellites that filed a combined report with their parent stations.

[3] The 177 UHF stations represent 181 operations including 4 satellites that filed a combined report with their parent stations. The 1972 data reflect 173 UHF stations representing 182 operations including nine satellites that filed a combined report with their parent stations.

Notes: Last digits may not add to totals because of rounding. ( ) denotes loss.

TABLE 3

Revenue and expense items for all TV stations reporting, 1973 (in thousands of dollars)

	Individual Items	*Totals*
Broadcast revenues		
A. REVENUES FROM THE SALE OF STATION TIME:		
(1) Network		
Sale of station time to networks:		
Sale of station time to major networks, ABC, CBS, NBC (before line or service charges)	$ 227,310	
Sale of station time to other networks (before line or service charges)	5,699	
Total		$ 233,009
(2) Nonnetwork (after trade and special discounts but before cash discounts to advertisers and sponsors, and before commissions to agencies, representatives and brokers).		
Sale of station time to national and regional advertisers or sponsors	1,221,058	
Sale of station time to local advertisers or sponsors	895,663	
Total		2,116,721
Total sale of station time		2,349,730
B. BROADCAST REVENUES OTHER THAN FROM SALE OF STATION TIME (after deduction for trade discounts but before cash discounts and before commissions):		
(1) Revenues from separate charges made for programs, materials, facilities and services supplied to advertisers or sponsors in connection with sale of station time:		
(a) to national and regional advertisers or sponsors	9,121	
(b) to local advertisers or sponsors	36,454	
(2) Other broadcast revenues	30,338	
Total broadcast revenues, other than from time sales		75,913
C. TOTAL BROADCAST REVENUES		2,425,644
(1) Less commissions to agencies, representatives, and brokers (but not to staff salesmen or employes) and less cash discounts	365,797	
D. NET BROADCAST REVENUES[1]		2,059,847
Broadcast expenses		
TECHNICAL EXPENSES:		
Technical payroll	$ 146,993	
All other technical expenses	66,176	
Total technical expenses		$ 213,169
PROGRAM EXPENSES:		
Payroll for employes considered "talent"		
Payroll for all other program employes	251,115	
Rental and amortization of film and tape	218,601	
Records and transcriptions	1,451	
Cost of outside news services	16,269	
Payments to talent other than reported above	11,799	
Music-license fees	41,557	
Other performance and program rights	23,486	
All other program expenses	116,398	
Total program expenses		680,677
SELLING EXPENSES:		
Selling payroll	99,317	
All other selling expenses	101,192	
Total selling expenses		200,510
GENERAL AND ADMINISTRATIVE EXPENSES:		
General and administrative payroll	91,300	
Depreciation and amortization	107,921	
Interest	37,964[2]	
Allocated costs of management from home office or affiliate(s)	44,357[3]	
Other general and administrative expenses	215,145	
Total general and administrative expenses		496,688
TOTAL BROADCAST EXPENSES		1,591,044
Broadcast income		
Net broadcast revenues		$2,059,934[4]
Broadcast expenses		1,591,718[4]
Broadcast operating income		468,216
Total of any amounts included in expenses, which represent payments (salaries, commissions, management fees, rents, etc.) for services or materials supplied by the owners or stockholders or any close relative of such persons or any affiliated company under common control		32,809[3]

[1] Includes $61,438,000 from barter and trade-out transactions

[2] Interest expense is being reported separately for the first time in 1973. Previously this item was part of "other general and administrative expenses."

[3] "Allocated costs of management from home office or affiliates" is being reported separately in 1973 for the first time. Previously this was included in "other general and administrative expenses". This allocated cost of management should also be reported as "payments to principals" in Schedule 3 line 4, but a number of stations failed to include it there this year.

[4] Stations reporting less than $25,000 in total revenues are not required to report items under revenues and expenses but are required to report total income. Therefore, totals under revenues and expenses are somewhat lower than totals under income.

Note: Last digits may not add to totals because of rounding.

TABLE 4

Broadcast financial data of three television networks and 692 stations, 1973 (in millions of dollars)

Broadcast revenues, expenses and income	Networks	% change over previous year	15 owned-and-operated TV stations	% change over previous year	677 other TV stations[1]	% change over previous year	Total three networks and 692 stations[1]	% change over previous year
Sales to advertisers for time, programs, talent, facilities, and services.								
Network sales	$1,835.3	9.1						
Deduct: Payments to owned-and-operated stations	35.3	2.9						
Deduct: Payments to other affiliated stations	193.3	4.3						
Retained from network sales	1,606.7	9.8	$ 35.4[2]	2.9	$ 197.6[2]	3.9	$1,839.7	9.0
Nonnetwork sales								
To national and regional advertisers	—		$273.4[3]	0.2	956.7[3]	5.7	1,230.2[3]	4.5
To local advertisers	—		113.4[3]	34.7	818.8[3]	12.8	932.2[3]	15.1
Total nonnetwork sales	—		386.8	8.4	1,775.6	8.9	2,162.4	8.8
Total sales to advertisers	1,606.7	9.8	422.3	7.9	1,973.1	8.4	4,002.1	8.9
Sales to other than advertisers	74.9	21.4	5.8	(4.9)	24.6	(8.6)	105.2	11.1
Total sales	1,681.6	10.3	428.1	7.7	1,997.7	8.1	4,107.3	9.0
Deduct: Commissions to agencies, representatives, etc.	276.7	9.2	74.9	6.5	290.9	9.1	642.5	8.8
TOTAL BROADCAST REVENUES	1,404.9	10.5	353.1	7.9	1,706.8	7.9	3,464.8	9.0
TOTAL BROADCAST EXPENSE	1,220.0	5.1	250.3	11.4	1,341.4	8.0	2,811.7	7.0
TOTAL INCOME (before federal income tax)	184.8	66.6	102.8	0.3	365.4	7.8	653.1	18.3

[1] Includes 64 satellites, 26 of which filed combined reports with their parent stations.

[2] Includes payments from networks other than ABC, CBS or NBC.

[3] A part of the increase in local sales for both network owned-and-operated stations and all other stations is due to a change in the way some stations classified national and local sales in 1973. These stations apparently reported as local sales some sales that would have been classified as national/regional in prior years. Although the full extent of this shift is unknown, comparisons of 1973 data for these categories with data for prior years should only be made with this in mind. These shifts would not affect total nonnetwork sales and year to year comparisons would be valid.

Notes: Last digits may not add because of rounding. ( ) indicates decline.

TABLE 5

Broadcast expenses and revenues of three networks and TV stations 1973[1] (in thousands of dollars)

Item	Technical	Program	Technical plus program	Selling	General and administrative	Total broadcast expenses	Total* broadcast revenues
3 Networks	[2]	[2]	$1,075,815	$ 40,836	$103,369	$1,220,020	$1,404,900
15 Network owned-and-operated stations	$ 42,604	$128,702	171,306	30,751	48,267	250,324	353,100
410 Other VHF network-affiliated stations	117,081	372,687	489,768	116,054	326,722	932,544	1,650,956
110 UHF Network-affiliated stations	17,332	37,553	54,885	16,045	41,666	112,595	118,631
Total 535 network-affiliated stations	177,017	538,942	715,959	162,850	416,655	1,295,463	1,769,596
32 VHF independent stations	20,518	98,201	118,720	20,009	43,777	182,506	199,595
50 UHF independent stations	13,012	40,763	53,775	15,716	30,455	99,946	90,664
Total 82 Independent stations	33,531	138,964	172,495	35,725	74,232	282,452	290,259
Total 617 stations	210,547	677,906	888,453	198,575	490,886	1,577,915	1,908,075
Total 3 networks and 617 stations	—	—	1,964,268	239,411	594,256	2,797,935	3,464,800

[1] Excludes part-year stations, satellite stations and those with less than $25,000 of time sales.

[2] Because methods of treating technical and program expenses differ among the networks, the two figures have been combined.

Note: Last digits may not add to totals because of rounding.

* After commissions. This column of figures was extrapolated from other FCC-released information, some of which is not published here.

TABLE 6

Revenue and expense items of three national television networks, 1973 (in thousands of dollars)

	Amount
Net broadcast revenues	
I. NETWORK REVENUES:	
(a) Revenues from sale of time when program is supplied by advertiser	$ 44,134
(b) All other advertising revenues	1,791,167
(c) Revenues from stations for cooperative programs	4,226
(d) All other broadcast revenues	70,655
Total gross broadcast revenues	1,910,182
Value of trade-out and barter transactions included in "all other broadcast revenues"	11,004
II. DEDUCT:	
(a) Payments to stations	228,568
(b) Commissions to advertising agencies, representatives, brokers and others, and cash discounts	276,745
Total deductions	505,314
III. NET BROADCAST REVENUES	1,404,869
Network broadcast expenses	
GENERAL CATEGORIES OF EXPENSES:	
Technical expenses	[1]
Program expenses	$1,075,815
Selling expenses	40,836
General and administrative expenses	103,369
TOTAL BROADCAST EXPENSES	1,220,020
SELECTED EXPENSE ITEMS	
Salaries, wages and bonuses of officers and employes engaged in following categories:	
(a) Technical	[1]
(b) Program	163,421
(c) Selling	14,559
(d) General and administrative	48,682
(e) Total (all officers and employes)	226,663
Depreciation of tangible property	18,390
Amortization expense on programs obtained from others (total)	624,430
(a) Feature film shown or expected to be shown in U.S. theaters	140,481
(b) All other feature film	17,391
(c) All other programs	466,558
Records and transcriptions	3,128
Music-license fees	6,248
Other performance or program rights	75,467
Cost of intercity and intracity program relay circuits	53,148
Total expense for news and public affairs[2]	139,836
Network broadcast income	
Broadcast revenues	$1,404,869
Broadcast expenses	1,220,020
Broadcast operating income	184,848

[1] Because methods of treating technical and program expense differ among the networks, the two figures have been combined.

[2] This figure contains costs already shown above. Costs of sports programs are not included.

Note: Last digits may not add to totals because of rounding.

TABLE 7
SHARE OF TOP 100 MARKETS IN TV REVENUES

	Top-100 markets (369 stations)		All others (294 stations)	
Time sales:	*($000)*	*% total*	*($000)*	*% total*
Network	179,900	80.1	44,344	19.9
Spot [1]	1,066,347	91.3	101,005	8.7
Local [2]	645,873	82.9	132,197	17.1
Total	**1,892,165**	**87.2**	**277,746**	**12.8**
Other revenues	**81,487**	**81.8**	**13,598**	**18.2**
Commissions paid [2]	307,032	91.1	29,889	8.9
Net revenues	**1,646,619** [3]	**86.2**	**261,456** [4]	**13.8**
Expenses				
Technical	163,420	82.2	35,242	17.8
Program	553,027	87.7	77,470	12.3
Selling	156,437	84.5	28,555	15.5
General & Adm.	354,333	78.4	97,943	21.6
Total	**1,227,216**	**83.6**	**239,210**	**16.4**
Operating income	**419,347**	**95.0**	**21,932**	**5.0**

[1] After trade and special discounts but before cash discounts to advertisers and sponsors and before commissions to agencies, representatives and brokers.

[2] Paid to agencies, representatives and brokers, but not to staff salesmen or employes. Figure also includes cash discounts.

[3] Includes $48,706,000 from barter and trade-outs.

[4] Includes $5,966,000 from barter and trade-outs.

(1972 data)

Source: FCC data reported in Broadcasting 10/22/73, p. 16

TABLE 8

Number of television stations reporting profit or loss by amount of profit or loss, 1973*

	Total		Network affiliated		Independent	
	VHF	UHF	VHF	UHF	VHF	UHF
Total number of stations reporting	457	165	425	112	32	53
Number of stations reporting profits	395	77	374	61	21	16
Profitable stations as percent of total	86.4	46.7	88.0	54.5	65.6	30.2
Number of stations reporting profits of:						
$5,000,000 or over	18	—	18	—	—	—
3,000,000-5,000,000	26	—	25	—	1	—
1,500,000-3,000,000	56	1	51	—	5	1
1,000,000-1,500,000	37	—	33	—	4	—
600,000-1,000,000	44	6	41	4	3	2
400,000- 600,000	40	6	39	5	1	1
200,000- 400,000	66	16	60	13	6	3
100,000- 200,000	45	12	45	9	—	3
50,000- 100,000	27	16	26	15	1	1
25,000- 50,000	16	7	16	4	—	3
Less than 25,000	20	13	20	11	—	2
Number of stations reporting losses	62	88	51	51	11	37
Unprofitable stations as percent of total	13.6	53.3	12.0	45.5	34.4	69.8
Number of stations reporting losses of:						
Less than $10,000	4	2	4	1	—	1
10,000- 25,000	4	9	4	5	—	4
25,000- 50,000	6	9	6	7	—	2
50,000-100,000	18	18	17	13	1	5
100,000-200,000	12	15	7	9	5	6
200,000-400,000	12	18	10	14	2	4
400,000 and over	6	17	3	2	3	15

* Stations operating full year only excluding satellite stations. Profits are before federal income tax.

TABLE 9

Investment in tangible broadcast property of TV networks and 666 TV stations as of Dec. 31, 1973 (in thousands of dollars)

	Number of stations [1]	*Original cost* [2]	*Original cost minus depreciation*
Three National networks	—	$ 245,798	$103,385
Network owned-and-operated stations	15	93,954	33,194
Other TV stations			
VHF	474	1,161,795	491,153
UHF	177	229,110	121,362
TOTAL	666	$1,730,658	$749,104

[1] Eight of these stations did not report investment in tangible property; some of these may be operating under lease arrangements. The count of 666 stations represent 692 operations including 26 satellites whose figures were reported in the parent stations' reports.

[2] In case of stations which have been sold, represents that portion of price assigned by licensee to property.

Note: Last digits may not add to totals because of rounding.

TABLE 10
REVENUES AND EXPENSES OF STATIONS BY TYPE, 1972

	452 VHF Affiliates ($000)	34 VHF Independents ($000)	116 UHF Affiliates ($000)	58 UHF Independents ($000)
Time sales:				
Network	206,782	1,631	15,800	276
Spot [1]	943,945	146,691	40,314	36,403
Local [2]	604,668	63,515	58,021	51,866
Total	**1,755,396**	**211,836**	**114,136**	**88,544**
Other revenues	**45,948**	**18,881**	**3,729**	**6,526**
Commissions paid [2]	272,202	37,183	13,362	14,172
Net revenues	**1,529,141** [3]	**193,533** [4]	**104,503** [5]	**80,898** [6]
Expenses				
Technical	149,084	19,935	16,548	13,095
Program	461,008	95,532	33,252	40,706
Selling	137,549	18,584	14,321	14,537
General & Adm.	343,157	40,405	38,688	30,027
Total	**1,090,799**	**174,455**	**102,808**	**98,364**
Operating income	**438,130**	**19,078**	**1,628**	**(17,556)**

[1] After trade and special discounts but before cash discounts to advertisers and sponsors and before commissions to agencies, representatives and brokers.

[2] Paid to agencies, representatives and brokers, but not to staff salesmen or employes. Figure also includes cash discounts.

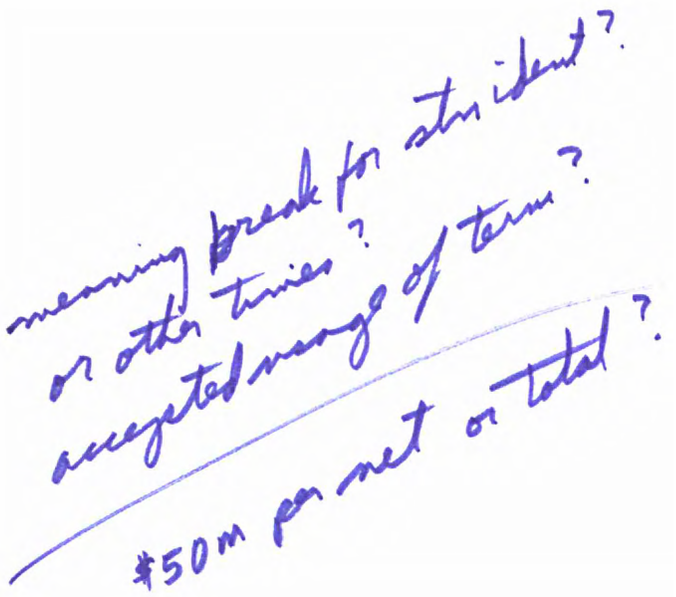
[3] Includes $39,390,000 from barter and trade-outs.

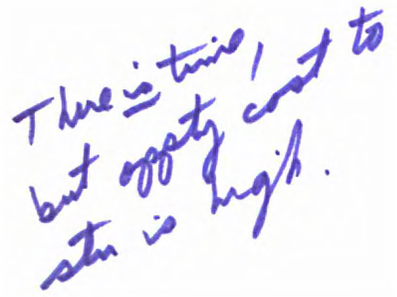
[4] Includes $6,243,000 from barter and trade-outs.

[5] Includes $4,003,000 from barter and trade-outs.

[6] Includes $5,035,000 from barter and trade-outs.

Source: FCC data reported in Broadcasting 10/22/73, p. 16


meaning break for student?
or other times?
accepted range of term?
$50m per net or total?


There is time,
but opportunity cost to
stu is high.

will simply threaten to switch affiliations. A station which carries network programs is paid by the network for the audiences thus produced. Of the $1835 million in gross network revenues in 1973, $229 million was paid to affiliated stations. (See Table 4.) The stations also are allowed to sell commercial time during "station breaks" in the programs.

Stations are interconnected with their networks by microwave communication channels supplied by the telephone company, for about $50 million per year. In the future these links may be supplied by domestic communication satellite systems.

For our purposes, the most important role played by local stations -- both TV and radio -- is in the production of local news stories. Local TV news is popular and profitable.[8] It is often the only source of local news other than a local monopoly newspaper. Unfortunately, perhaps by virtue of its very form, television news on the local level leaves much to be desired. Even leaving aside the recent trend toward "happy talk" local news, dripping with banality, the medium is not a good substitute for ~~print~~ when it comes to detailed coverage of complex events. There simply isn't time. Moreover, for reasons to be discussed, local news stories avoid controversy, and avoid catering to minority tastes.

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8 See Epstein, Brown.

Besen to Mitchell
paper on Watergate programming.

Local stations are of course in competition with each other and with local newspapers for audiences and advertisers, but this competition is attenuated by the dominant role of network programming. The networks are a three-firm oligopoly with the usual features of oligopoly behavior. There is rivalry among the networks in those dimensions where implicit cooperative behavior is difficult or impossible, especially in program quality.[9]

It is difficult to characterize viewer behavior in general. The evidence is consistent with the view that viewers are rather passive, on average, in their choice of programs: it takes extreme provocation to switch channels. (Network executives apparently believe that a large part of the audience for a given program is determined by the popularity of the preceding program.) On the other hand, viewers may appear to act in this way simply because the programs available are all pretty much alike. In any event, TV viewers spend an enormous amount of time at it -- upwards of 6 hours per adult per day, on average, it is claimed. A successful prime time network TV show reaches about 15,000,00 homes, giving it an audience larger by far than that of most other media messages.*

Entertainment programs are produced by program producers or series packagers in Hollywood. This industry is rather competitive.

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9 See Owen, Beebe, Manning, Chapter 4.

* Wire service stories may reach a larger audience, but it is difficult to measure their "circulation."

Although the major studios as a group dominate it, independent producers can and do succeed quite often in entering the market. The main market, of course, is for network sales. (See Tables 11 and 12.) The syndication market is dominated by shows that have previously run successfully on the networks, and is limited to independent stations and a few hours per day on affiliates of the networks.[10] (See Table 13.)

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10 Ibid.

TABLE 11

Hours of Network TV Series Programs Per Week

Produced by Hollywood Studios, 1974-75 Season

Columbia	4.5
MGM	1.0
Paramount	3.5
20th Century Fox	1.5
Universal (MCA)	13.5
Warner	3.0
Independent Studios	19.5

Source: McAlpine

TABLE 12

Program Production Revenues at Major Studios (1973)

(millions of dollars)

Studio	Revenue from Television
Columbia	81
MGM	53
Paramount	50
20th Century Fox	36
United Artists	48
Universal (MCA)	120
Warner	57
Total	444

Note: See Tables 3 and 5 for expenditures on programming by stations and networks. These firms had revenues in 1973 from theatrical films of $887 million.

Source: McAlpine

TABLE 13

Sources of Programming on TV Stations, 1973

(Commercial stations; numbers are % of total schedule)

Source	Network Affiliates	Independents
Networks	64	11
Syndicated	32	84
Local Production	4*	5

* This represents about 5½ hours per week.

Source: Broadcasting Yearbook, 1974, p. 70.

Theory of Broadcast Regulation

The legal theory of broadcast regulation rests on constitutional tests of the Communications Act of 1934 and individual Commission policies stemming from that Act. Such tests have not been very numerous:* the network case NBC v. U.S. (1943), the Red Lion case (1968), the CBS v. DNC case (1972) and the Midwest Video case (1972). The first and last deal with extensions of FCC authority to technologies or institutions not covered in the Act, under the doctrine of "ancillary" regulation. This will be discussed in a later section. Red Lion and DNC deal with the constitutionality of content regulation, and the First Amendment rights of listeners, viewers, and broadcasters. All of these cases and others (e.g., the Carroll case, 1958) share a common theory of broadcast regulation. I will outline this theory and then criticize it.

The premises of the theory are straightforward. The electromagnetic spectrum, so the story goes, is a valuable public resource. The spectrum is in scarce supply. In the absence of government regulation the resource would be unusable because interference among users would result in chaos. Broadcast licensees are instrumentalities of the state and fiduciaries of the public.** Because of the scarcity of frequencies, and the peculiar status of licensees, their behavior must be regulated. In particular, they must be required to act "in the public

*See Bibliography for case citations.

** (see next page)

** (footnote, p.29)

The notion that broadcast licensees are instrumentalities of the state under the so-called state action doctrine has not been accepted by a majority of the Supreme Court. (See CBS v. DNC, 412 U.S. 94, 171 (1972), Brennan, J., dissenting.) It was however accepted by the court of appeals in that case. In any event, the state instrumentalities theory is not essential to the argument summarized here; the public fiduciary doctrine will do by itself. I include state action in order to put the case as strongly as possible.

this game proves to should be related to the lawyers mental framework - that of the economist et al.

interest." This regulation would not be required if it were not for the scarcity of licenses (or frequencies) and for the role of the licensees as state instrumentalities.

These premises, it is said, require a balancing between the First Amendment rights of the licensee and the public's "right to hear." This balancing permits certain kinds of regulation of the behavior of licensees which would not otherwise be tolerable from the First Amendment viewpoint.

From these premises a number of more specific conclusions are said to follow. Among these are: (1) The ability of a licensee to perform his public service responsibilities is not unrelated to his economic viability. Hence, the government is not free to ignore the effects of its allocation policies on the profits of existing licensees. (2) The FCC can require a licensee to behave in a certain specified way with respect to his carriage of opinions and views on "controversial" public issues. (3) There does not exist a right of access by the public to the facilities of licensees. (4) The Commission may extend its regulatory jurisdiction to institutions (networks) or technologies (cable television) not covered in the Act if this is necessary in order to preserve the Commission's "scheme" of broadcast regulation. (5) The public interest in broadcast service precludes any right on the part of the public to enter into contracts with broadcasters to pay for programs.[11]

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11 This is an FCC rule which has been upheld in the courts. See Fourth Report and Order in Docket 11279 Subscription Television 15 FCC 2d 466 (1968); aff'd in Nat'l Assoc. Theater Owners vs FCC 420 F. 2d 194 (D.C. Cir. 1969); cert. den. 397 U. S. 922 (1970). The rules are in section 73.643 of the FCC Rules and Regulations.

what about advertising a magazine for sale? Audubon? Sat Rev?

The implementation of this theory of regulation requires that the government select licensees who promise to perform in the "public interest." At certain times, as at license renewal or license challenge, the Commission must evaluate performance in terms of this criterion -- that is, the public interest and the promises. This requires examination of program content.

While the theory of broadcast regulation clearly and explicitly requires active responsibility by the licensee for program content, and is grounded on the notion that the editorial function is performed solely by licensees, the reality is far different. In practice, broadcasters relinquish control of program content to networks, because this is more profitable than local control. Advertising time is, for most purposes, sold on a common carrier basis to a well-defined subclass of customers.[12] The audience, far from being the object of service, is merely an intermediate product. Audiences are not served in the sense of the legal theory. They are instead attracted and then sold to advertisers. The broadcaster's concern for his audience is akin to the farmer's concern for his cattle, or a trapper's concern for pelt-carrying animals. The trapper takes care to offer high quality bait, particularly if he is in competition for the animals.

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12 That is, the station or the network publishes a rate card setting forth the prices at which it will accept advertising matter. Commercial advertisers who wish to buy time simply pay the rate; so long as they are advertising standard products or services there is no discrimination among them. This would not be true of someone who wished to advertise non-commercial ideas.

∃ nothing terribly (a priori)
wrong with regulation
that is enforced only ~~with~~
in the serious breach; indeed,
burden of proof locus can provide
such an effect. Where FCC goes
astray is (1) detail & (2) insisting on theory of
its affirmative pub int maximization
when in fact it is pub int failure (gross)
that it acts on.

Finally, the government does not live up to its own theory of regulation. That is, notions of the public interest which might generally be considered consistent with the paternalism of the overall theory are not in fact employed in the process of license award and renewal. Activities which from the paternalistic viewpoint could be regarded as rather egregious violations of the fiduciary role are tolerated by the Commission until overwhelming external pressure is brought to bear.[13]

The premises of broadcast regulation are largely false. The conclusions which have been asserted to follow from those premises are not, in fact, logical derivations, and are in any event not unique.[14] Finally, the reality of broadcaster behavior and the practice of regulation do not accord with the theory.

There are a number of levels on which the theory of broadcast regulation can be criticized. One can attack the premises, or the logical consistency of the conclusions, or the departure of reality and theory.

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13 Examples include the quiz show scandals, cigarette advertising, and violence in children's programming.

14 That is, there are other conclusions which could be drawn which are more compatible with freedom of expression.

what about p. 30, item #1 ?

Case not well made
if indeed this is the
case to make.

This is misleading: non-renewal is
equiv to the death penalty; making
death penalty for traffic violations, advertising abuses,
etc., simply confers automatic total
power in the law enforcers.

It is important to point out at once that one of the principal reasons why reality and theory diverge is that the legal theory contains no recognition of economic incentives. There is a pretense that licensees can be expected to act in a fiduciary role without regard for their own self-interest. Moreover, because the theory recognizes no divergence between the economic interests of the licenseee and his fiduciary trust, it fails to provide any mechanism for balancing or channeling these conflicting incentives, much less a mechanism for actually harnessing the economic incentives to achieve the "public interest" objectives.[15]

What lies behind this failure of law and policy? We have already examined the historical and technological "accidents" involved. There seem to be at least two factors at work. The first is simple ignorance on the part of courts, commissions, and congressional committees of the economics and technology of broadcasting. They are uninformed about the first and frightened by the second. The other factor is a certain psychological attitude toward the electronic media. Many people regard television, for instance, as being too powerful and influential to be allowed freedom from government control. This attitude is not at all limited to liberals; many people who would otherwise regard themselves as conservative have this feeling.* Of course,

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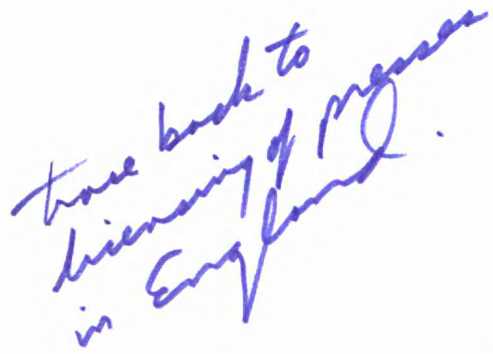
15 To the extent that such a mechanism exists, it lies in the threat of license revocation or non-renewal. This is a negative incentive.

* "Liberal" and "conservative" distinctions break down on these issues. See, for instance, the opinions of the justices in CBS v. DNC.


trace back to
licensing of
in England.

a good deal of the "power and influence" of television is due to government policies limiting spectrum allocations to broadcasting and otherwise tending to produce concentration of control.[16] But the feeling is deeper than this. Perhaps it has something to do with McLuhan effects--the nature of the medium conditioning and interacting with sociological phenomena. Hard as it may be to defend, this feeling plays an enormously important role in determining media policy. There may be something to it. If so, there exists a range of tools available to policymakers for dealing with it: tools which are less intrusive on First Amendment freedoms (and certainly more effective) than present regulatory policy and practice. If television is dangerous to society, maybe we would be better off without it. That is an acceptable proposition. What is not acceptable is the notion that a dangerous medium should or can safely be "controlled" by the government, in the sense of content regulation and licensing. It may be that all of this is no deeper than the fear with which the medieval church and state viewed the technology of printing. (The Index Liborum Prohibitorum was first published in 1564.) That technology certainly did have "dangerous" sociological and cultural implications for the status quo, though these are easily exaggerated. If television is only dangerous in that

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16 This is somewhat Orwellian. The power of the networks, often cited as a rationale for government control, is the result of government control.

which objectives?

i.e. "in any qualitatively different way"

(z) But FCC requirements on power, camera stds, etc add cost & create unnecessary scarcity.

(x) nor, more to the point, from licensing

documentation?

sense, then we have a real conflict between the principle of free expression and the interest of the state in internal order.[17]

The analysis of the theory of broadcast regulation can however proceed in a less general plane. Let us turn to the premises: (1) The electromagnetic spectrum is a valuable public resource only because the government has chosen to nationalize it; otherwise it is in no wise distinguishable from paper, ink, land, or other resources. (2) The spectrum is not in "scarce supply" to any greater extent than steel, plastic, or pencils. (3) A chaos of interference would accompany the end of government regulation only if private property rights could not be (and were not) defined.[18] But such rights can be defined. (4) Broadcasters need not be

fiduciaries of the public. The law which makes them so is subordinate to the constitution. There is no technological or economic necessity for this role. (5) Licenses are scarce only because the FCC has chosen to make them scarce. Moreover, some licenses (e.g., U.H.F. assignments) are not scarce; they go begging. In any event, the necessity for regulation of content does not follow from the premise of scarcity. A more reasonable proposition from this premise is the necessity for common carrier status.[19] The Communication Act's rejection of

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17 It would be unfortunate if the argument were put in these terms, since the Court has generally favored the latter interest in balancing these goals.

18 See Coase, de Vany, op. cit.

19 By this I mean that broadcasters be required to sell time to all comers at published rates. This may or may not be accompanied by profit regulation.

why were the prohibitions on common carrier status put in 34 Act? 27 Act?

This #6 needs lots of expansion research & exploration both historical & re: future implications.

logically maybe not, but can Court find differently w/o reading substantial portion of Act? Given common carrier prohibition, can Court derive a theory for creating a right of access for broadcasting w/o so doing for other non-licensed media? or w/o asserting state action to the point (desirable?) of making licensee a state instrumentality? Just legislation the proper route rather than that offered by DNC? And given likelihood of that, can Court avoid declaring 34 Act unconst? Yes, where & how?

common carrier obligations must be subordinated to the constitution. (6) There is no reasonable interpretation of the constitution which endows the public with a "right to hear" (be informed by) a government-conceived scheme of regulation; on the contrary, the constitution appears to say that government is to have no direct control over the process by which people are informed.

In sum, broadcasting does not logically possess any "peculiar" characteristic which would enable one to distinguish it from the print media for First Amendment purposes. Moreover, even if it did (that is, if the spectrum could only be allocated by fiat or if the spectrum were "peculiarly" scarce) there would logically flow from this certain different propositions, more consistent with freedom of expression, such as a public right of paid access to broadcast transmitters.*

Pragmatically, if one wanted to achieve the most obvious sorts of paternalistic goals, there are perfectly straightforward tools available by which broadcasters can be led, as if by the invisible hand, to to provide such programs.[20] These economic incentives are not employed, and the theoretical coercive powers of the FCC are (luckily) not in practice much used either.[21] Even on pragmatic grounds, the structure of broadcast regulation is bankrupt.

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* The opinion of the court in CBS v. DNC, rejecting this notion, is quite simply illogical, as several dissenting justices point out.

20 E.g., subsidies, tax incentives, and the like, perhaps tied to spectrum use fees.

21 That is, licenses are seldom actually revoked. This does not mean that the threat of revocation does not significantly affect behavior. Nuclear deterence does not require actual explosions.

Many of the people involved in producing network television news and documentaries believe that the present structure and regulation of broadcasting is essential to their survival and to the survival of their product. Whether or not one has sympathy for their essentially arrogant and elitist view that the public ought to see what they (the producers of these programs) regard as "good" programming, we can evaluate the strength of the claim itself. The problem, of course, is that this material is now regarded by the networks as unprofitable by itself. Its costs exceed its advertising revenues. It is however profitable in the broader sense that it helps to retain FCC licenses and serves as a justification for government restriction on competition from new technologies. But the notion that the material is unprofitable in the direct sense is due to the dependence on advertising and the fewness of competing outlets. A program which produces an audience of "only" a million homes is unprofitable when only three networks split a potential audience of 65 million homes. It might look better if there were ten networks, and it would certainly look better if the one million were allowed to pay 10¢ each for the program.

Although the preceding considerations are of course irrelevant to the constitutional question, one suspects they underlie much judicial thinking on these issues. The ultimate point is that speakers, operating without constraints in the marketplace, must produce what people will see and hear; neither the government itself nor its licensees are appropriate or proper proxies for speakers. Moreover, it is <u>not</u> technically or economically <u>necessary</u> that there be proxies for speakers in broadcasting, as the courts and congress seem always to have assumed, usually without further support than forty year old congressional committee reports.

The Carroll Doctrine and Taxation by Regulation

The ability of regulators to require broadcasters to provide programming other than that programming which maximizes profit depends on the extent to which broadcasters are protected from competition. If broadcasters were subject to free entry of competitors, their profits would be reduced in equilibrium to "normal" levels. At these profit levels, any attempt by the government to alter program content would push broadcasters over the brink of bankruptcy. Accordingly, broadcasters must be allowed to earn more than normal profits in order to be able to provide "public service" programming.[22] For many years the FCC refused to accept this elementary economic fact, and tried to have things both ways. Finally, the court of appeals in the Carroll case educated the Commission. The specific issue in the case was the complaint of an existing licensee that the FCC's proposed grant of a competing license in his market would destroy his economic ability to perform his public service obligations. The Commission refused to accept this argument, and the court had to tell the Commission that it could not have its cake and eat it too.

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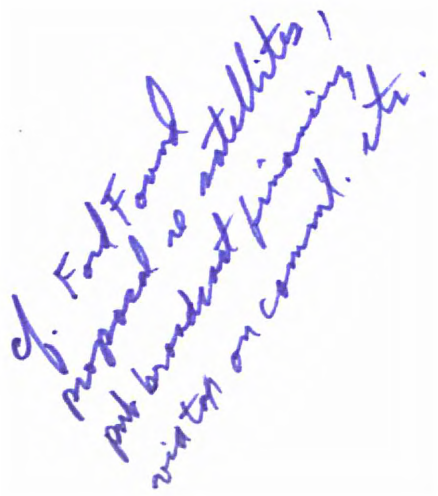
22 If the FCC could impose the constraint on all of the competitors, this would not be true. However, the Commission cannot regulate non-broadcast media.

Richard Posner [ ] has aptly called this behavior "taxation by regulation." Certain services which the government decides ought to be provided are made over into obligations of regulated firms. These firms can perform the obligation only if protected from entry, and thus enabled to earn monopoly profits on their non-public service functions. The cost of this falls on the purchasers of the unsubsidized services, and on profits. There are many examples of this outside of broadcasting, one case being the ICC's insistence that railroads provide passenger service.

Taxation by regulation is usually bad policy. This is so for several reasons. First, there may exist a number of more efficient ways to produce the revenue required to support the public services in question, ways which do not produce the dead-weight loss of monopoly pricing. In this respect taxation by regulation is in the same category as the old monarchial practice of granting chartered monopolies in order to raise revenues. Second, the consequence of this practice is the creation of a vested interest with claims on the "scheme of regulation." These claims serve as a rationale for protecting the interests against institutional and technological change. In broadcasting the best current example of this is cable television. Broad-casters have more or less successfully argued that cable, with


Carroll case
needs research;
law; study; content; etc.


J. Ford Found
proposal re satellites;
pvt broadcast financing
victory on command. etc.

its multiplicity of channels, must not be allowed to freely compete with broadcasters because this would destroy the broadcasters' ability to perform their "public service" obligations. The Commission, mesmerized by its own theory of regulation and the myth that "public service" programming really exists, has largely accepted the argument, as have the courts. Thus, the Commission's interest in an objective (public service programming) which bears no obvious relationship to consumer wants is allowed to dominate the valid consumer interest in greater choice. Finally, of course, from the First Amendment viewpoint, the Carroll Doctrine creates an unfortunate alliance between the government and an artificially small group of media interests, an alliance which is in necessary conflict with forces promoting greater competition and hence freedom in the marketplace of ideas. In a word, the effect is to raise the price of access to the public through the media higher than it needs to be, and to create unnecessary monopoly of control over the channels of mass communication. This monopoly is reinforced by the notion that only the licensee can control content on his facilities.

Even if one accepts the public service thesis, there are better ways of proceeding. For instance, auctioning of property rights or leasehold rights in the spectrum would produce a great deal of revenue which could be used to subsidize "public service" programming. (See Table 14 for station sale prices; compare Table 9.)

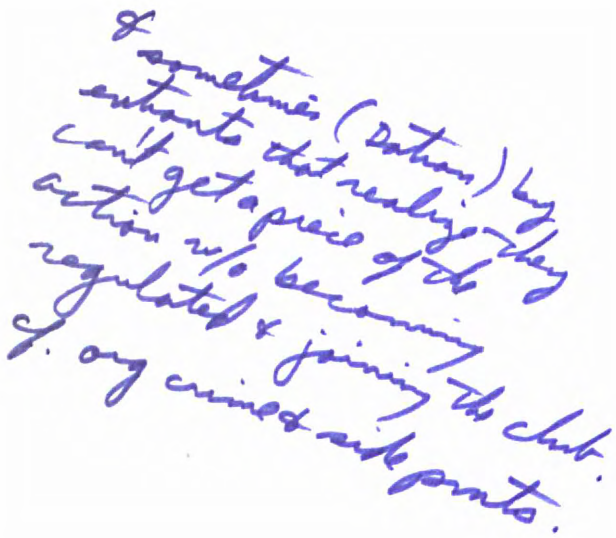
TABLE 14

Number and Value of Broadcast Stations Changing Hands, 1970 - 1972

(dollar figures in thousands)

	Number of Stations	Total Sale Prices	Average Price
Radio Only	777	$326,220	420
Combined Radio & TV	4	1,788	447
TV Only	83	511,656	6,165

Source: Broadcasting Yearbook 1974, p. 73.


& sometimes (Datum) by
entrants that reading they
can't get a piece of the
action w/o becoming
regulated & joining the club.
J. org crime & side pants.

A natural corollary of the Carroll Doctrine is that new technologies and institutions cannot be allowed to disturb the monopoly profits of broadcasters; otherwise, the base of taxation would be destroyed.[24] Accordingly, the courts and Congress have upheld or extended the Commission's right to regulate these new technologies or institutions. The first instance of this was the extension of FCC power to networks, which do not themselves use the spectrum and accordingly are not subject to Commission licensing.[25] Later, the FCC's authority was extended to certification and specification of equipment produced by electronic manufacturers, to communications satellites, and to cable television. In some of these cases, Congress has acted. When Congress had not, the courts simply endorsed FCC extensions of power.[26] In each case, however, the theory by which the extension is justified is the protection of the FCC's regulatory "schemes." In practice, the extensions are promoted by vested interests seeking to protect monopoly profits.[27] Certainly the effect of the extensions has been to remove or control threatened

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24 Monopoly profits: See Levin [ ], Greenberg [ ] for measures of rents. A rough calculation shows that the average TV station has a market price about three times greater than the original cost of its initial investment in tangible property.

25 This is the "network" case. The Commission now makes rules for the networks by forbidding station affiliation with a network which does not behave.

26 The latest case involves cable. In Midwest Video the court began to seem uncomfortable in this role, and invited suitable legislation.

27 And sometimes by unregulated firms seeking federal protection from local regulation or relief from "excessive" competition.

but - just above, you have argued the ~~[illegible]~~ FCC sought (UHF) & opposed (cable) more antitrust: why?

sources of competition or institutional arrangements which respond better to the incentives of the marketplace--that is, to consumer demand. Consumers did not want to purchase UHF converters for their TV sets, so Congress and the Commission required manufacturers to install them.[28] Consumers still did not use them, so the Commission required manufacturers to put "clicks" on the UHF turning dials.[29] Consumers showed that they were willing to pay for additional channels provided by cable systems. The Commission limited the number and kind of channels that could be thus supplied, and proceeded to impose a series of regulatory taxes on the cable systems.[30]

This behavior is consistent with the hypothesis that the Commission is simply a tool of rich and powerful broadcasters. There is some truth in the hypothesis, but the reality is more subtle. In practice, the Commission responds to political pressures exercised through Congress and the executive branch, and these pressures reflect all of those interests to which the broader political process is responsive. Many of the failures of the Commission can be traced to fundamental imperfections in the democratic process itself, of which one is the well-known under-representation of large groups, each of the members of which has a small stake in the issue at hand. Such groups

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28 All Channel Receiver Act.

29 Detent Tuning rules.

30 Cable Television Rules (1972).

are not readily organized, and their weight is small in political decisions, particularly obscure decisions involving apparently complex technological or instutitional policies.

Probably the only way in which such groups can be protected -- and by "such groups" I mean principally consumers -- is by broad legislation affecting a wide range of administrative behavior. Thus, it is probably best to argue for laws which proclaim that "no regulatory agency may . . . "do this or that, than to take individual cases seriatum. But the development of a general theory of regulatory behavior must precede such policy-making, and that theory does not yet exist.

Localism

A persistent theme in FCC regulation of broadcasting is the doctrine of localism. There are two levels at which this can be discussed. The first is the political and economic motivation for the doctrine, and the second is the economic viability of localism as a goal -- that is, its economic costs.

Localism is a goal with deep roots in the American political experience. It is associated very closely with representative democracy and populist suspicions of large national corporations. In the context of broadcasting, localism means three things: local ownership of broadcast facilities, a preference for smaller as opposed to larger service areas for each station, and actual program control and selection being exercised at the station level. The source of this doctrine can be traced to early decisions about spectrum allocation. There was a trade off to be made between the creation of stations which would cover large areas, so that every viewer could have access to many channels, and the creation of less powerful stations, each covering a single city, giving viewers fewer choices but, in return, a locally owned facility.[31] The latter course was taken.

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31 See discussion of the "DuMont" plan in Noll, Peck & McGowan[ ]TV stations use a part of the spectrum where only "line of sight " communication is possible, thus limiting the coverage area which can be reached by a single antenna. But additional areas can be (and are) secured by using additional antennae - called "repeater" stations. Sometimes these auxiliary transmitters broadcast the same programs on a different frequency, in which case they are called "translators." These are common in rural areas, where they compete with cable television systems.

indeed, potentially, there may be no right choice.

not necessarily totally futile; national networks some regional (sports) nets have formed to take the most features out of the FCC system. Moreover, locally-oriented programming can get an audience on occasion when a sufficiently interesting program or issue comes around.

or do they exist to fill the hole left by network restriction of national advertising time?

From the point of view of freedom of expression, there are arguments on both sides of this question. The regional station approach provides greater direct competition among stations, and provides each viewer with a wider range of choice. The local station provides an opportunity for discussion of local issues, and perhaps reduces the power of monopoly local newspapers. Politically, the right choice is not obvious. In practice, the FCC allowed 30% of the stations to be owned by local newspapers, and in any event the local stations do not in fact serve as a significant forum for the discussion of local issues, in part for economic reasons, and in part because the Fairness Doctrine inhibits any controversy on television.

In practice localism is futile because it is much more profitable for stations to affiliate with a network than to produce or select their own programs. This is due to the public good nature of programs, or the economics of scale in program supply relative to audience size. This is not inevitable. It simply turns out that local tastes in TV programming are not sufficiently strong or unique to offset the economies of national programming, given the number of outlets. As a result, local programming is limited to local news and a few programs, whose audiences are small, put in to satisfy the FCC's penchant for localism. Given the economic facts, both on the demand and supply sides, it is obvious that pursuit of localism is not worth its cost. The cost can be

measured by the consequences of the doctrine for the number of competing voices in the marketplace of ideas. One consequence of localism in spectrum allocation is that only three national networks are viable, because most cities have only three VHF-TV assignments. A reformation of the allocation scheme could provide all viewers with more choices and insert greater competition in the marketplace of ideas, without in practice giving up any of the unobtainable benefits of localism except local news shows. The reader must judge for himself whether local TV news shows are worth the cost involved in maintaining them.

Economic Biases in Program Selection

Firms in a market environment must choose not merely the price or quality of output they will produce (the variable emphasized in traditional economic theory) but also the character of their product. The problem of firm "location" in "product space" has not received the same attention as the traditional price, quantity relationships have. But partly because broadcasters do not charge consumers a price for their programs, there is a good deal of economic literature on the problem of program choice. The ultimate question, of course, is whether broadcasters under one or another structure of incentives will produce the "right" mix of programs. There are two different notions of what constitutes the "right" mix of programs. The notion which is implicit in the traditional legal theory of broadcasting is that programs ought to serve the "public interest." This is not very helpful. In practice, it means that entertainment programs ought to be leavened with news, public affairs, educational and other program types which appeal to the paternalistic standards of regulatory theory. The economic standard of an optimal program mix is that mix which maximizes the sum of consumers' and producers' surplus, given whatever constraints are relevant on the production side.[32]

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32 "Consumer surplus" is the difference between what the programs are worth to consumers and what is actually paid for them. Producer surplus is essentially profit. For a defense of this measure of economic welfare, see Harberger, Willig.

The traditional theory of program patterns in broadcasting put enormous emphasis on the distortionary role of advertising support.[33] Moreover, the traditional analysis did not utilize the surplus welfare measure, but instead emphasized audience sizes and the number of viewers receiving their first choice program. According to this analysis, since broadcasters sell audiences to advertisers rather than programs to viewers, consumers can exercise choice only on a one-man, one-vote basis, and are not free to express the intensity of their preferences for programs. Depending on the structure of competition in broadcasting, the number of channels, and the nature of preferences, this could have varying results. If there are only a few channels, then non-collusive competition among broadcasters tends to produce "duplication" of programs--excessive sameness. This is a phenomenom recognized for many years in two-party political systems and other contexts. Monopoly control of the few channels, on the other hand, elicits a tendency toward "common denominator" programs. These are programs that most people will prefer to turning off their sets, but which are not anyone's first choice. As taxonomic concepts, both "duplication" and "common denominator programs" have certain infirmities. The existence of either phenomenon depends critically on the nature of consumer preferences, about which little is known.

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33 The traditional literature on TV program patterns is found in Steiner ( ), Rothenberg ( ), Wiles ( ) and Beebe ( ). For a critical summary see Chapter 3 in Owen, Beebe , and Manning ( ).

It had been thought that the underlying "problem" is advertiser rather than viewer payment to broadcasters. Given this constraint, a possible solution is to have competing broadcasters but lots of channels, or to have competition for audiences over time on the few channels. But for some combinations of tastes and costs and channel capacity, monopoly control of all channels did produce the best economic result in these models, and this is a difficulty for First Amendment goals.

More recent works suggest that advertiser support per se is not the problem. Firms competing in product space always have a bias against certain kinds of products, provided there are any fixed costs of production.[34] In particular, there is a bias against products demanded by a relatively small group of consumers with rather intense preferences -- that is, products whose demand curves are of low own-price elasticity. Broadcasting would have this problem even if consumers could pay directly for programs, because fixed costs are very important. But advertising support and limited channel capacity almost certainly make the problem worse.

Given the present structure of broadcasting, this means that minority taste programs, opinions, and views are probably systematically discriminated against, strictly as a result of economic incentives facing broadcast firms. (Minority-taste

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[34] See the Appendix to this chapter for an explicit analysis of the relationship between broadcast structure and program patterns.

here means preferences for material which are held by relatively small groups, each member of which might be willing to pay quite a lot for them.) Even with direct viewer payment and lots of channels there would still be some tendency in this direction, although things probably would not be as bad.

The political implications of this are obvious, and they are worsened by the Fairness Doctrine's incentive to avoid controversy. (Controversy is in this context closely related to minority tastes.)[35]

Given the existence of these effects, one has to ask what structure for the broadcasting industry would produce the best possible results in terms of consumer welfare. (An "optimal" result is not obtainable unless centralized planners or discriminating monopolists know everything about individual consumer preferences. This is, of course, impossible, and even if it were not impossible it would be undesirable for First Amendment reasons.) The structure of the broadcast industry is, as we have seen, entirely the creation of government policy regarding spectrum allocation, pay TV, cable television, and the like. Hence this is the crucial policy variable.

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35 That is, tastes or views held by a small minority of the population are likely by virtue of their unpopularity to be controversial.

The present structure of broadcasting, with artificially limited channels and rules against pay-TV, is very nearly the worst structure that can be imagined. The solutions are clear; and they follow both from the Steiner analysis and from the analysis of monopolistic competition in product space: remove the artificial barriers to channel expansion, and let people express the intensity of their preferences by paying directly for programs. These policies are not going to produce a perfect result, but they will almost certainly improve matters. Fortunately, these policies are also consistent with greater freedom of expression.[36]

The real import of these "bias" effects is that the current system of broadcasting is very far from being the best that is available, almost no matter what set of premises are made about spectrum allocation, channel capacity, or consumer preferences. This is a serious indictment. What the present structure of regulation and policy does do is to ensure excessive profits for existing broadcasters, and provide a rationale for continued direct government intervention in program content.

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36 With this caveat: It is conceivable that FCC regulation does result in the airing of some programs of very limited appeal (religious programs?) which would not be produced in a competitive, multi-channel pay-TV system. I regard this as a doubtful proposition, but it can not be dismissed out of hand.

Paying for Programs

Because early technology made it difficult to charge listeners directly for the services provided by broadcast radio, revenues had to come from advertising. Early stations were associated with, and promoted, department stores.[37] Later, independent stations sold time to advertisers, who supplied whole programs. This is in marked contrast to early newspapers where advertising was a relatively late development. Things might have been otherwise if radio had been delivered by wire, as it is sometimes today in carrier current systems.[38] The British experimented with wire delivery, but eventually abandoned it.[39]

One result of the exclusive dependence on advertising was the aggravated program bias effects we have already explored. Another was occasionally serious advertiser influence on news and program content. This was particularly apparent in the McCarthy era, when no advertiser could afford to support programming with "blacklisted" talent. But the most serious implication of advertiser support was the creation of a myth -- the myth that television was "free."

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37 See Barnow [ ], Herring & Gross [ ].

38 These systems use electrical power lines to carry the signal, and are common on college campuses.

39 Apparently because it threatened the BBC monopoly on broadcasting. The parallel with U.S. cable television policy is remarkable. See Coase [ ] for a description of the British experience.

Television is free only in the sense that viewers can not pay directly for programs. They certainly pay for sets, and they pay indirectly for the advertising which pays for the programs. It is an open question whether the price of consumer goods would fall in the absence of television advertising. Certainly most advertisers would substitute other media.

The notion that television is "free" is an example of Orwellian double think - like the notion that the "Fairness Doctrine" is fair. The rules and institutions surrounding television are in fact constraints on freedom, since they prohibit a whole range of possible contracts between viewers and programmers. "Free" television means that it is illegal for firms to offer most programs to the public for a price, and illegal for viewers to pay for them.[40] Unfortunately, unlike most such government attempts to intervene in the marketplace, technology does not permit a black market in this area. The prohibition on pay-television ensures that the economic welfare of society is lower than it would otherwise be.

Why does government policy prohibit voluntary contracts between viewer and programmer? The answer really is not obvious. No doubt many people think that they would be worse off paying

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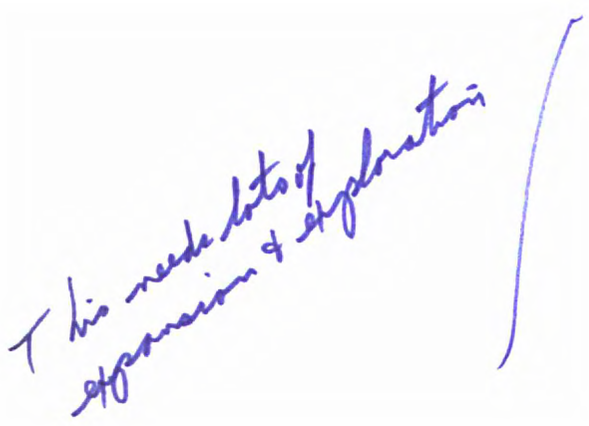
40 See FCC rules and regulations on pay-TV. These rules prohibit pay-TV broadcasts of most sports, most movies, and all "series" programs, and they prohibit any commercial advertising on pay-TV programs. See note 11, supra.


This needs lots of
expansion & explanation

for something which is now "free." But this is incorrect, because the "something" would be different, and worth more.[41] Some interest groups would be harmed by pay television, among them theater owners. Some portions of the TV industry associate pay television with the increased channels, and therefore increased competition, of cable, and disapprove of it for that reason. And there are certainly some viewers who would be worse off with pay television; these would be viewers who place no value on any conceivable programming other than that now offered, and who do not mind commercials. Advertisers would not be harmed particularly by pay television unless there were a continued outright ban on advertising in pay programs, and even then it is not obvious that harm could result, so long as competing advertisers were affected equally.

Nevertheless, there are few safer predictions than the forecast that Congress (and therefore the FCC) will continue to prevent people from paying to see the programs they want. There is sufficient folk ignorance associated with the Orwellian "freedom" of television, and so strong a public preoccupation with the medium, that politicians would be foolish to seem to tamper with the electronic genie. Pay TV, if it is possible at all, can only be achieved as an indirect result of other policies or new technologies, like cable.

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41 The most compelling argument for pay-TV requires that channels not be artificially limited. Pay-TV with continued artificial limitations on channel capacity might well only make consumers worse off, and broadcasters better off, depending on the structure of preferences and whether or not advertising were allowed. (See Appendix.)

The rules against pay-TV have direct First Amendment consequences. Assuming for the moment that there were sufficient channel capacity (via UHF and cable), speech and press are directly inhibited. A great many messages which would otherwise be uttered on television are not because the required market contracts are forbidden. It is as if Congress prohibited subscriber payment for newspapers and magazines. The effect would be to reduce the number of these media, and especially to reduce the number of those small journals catering to minority tastes, which receive little advertising revenue. Even if the channel constraint is still binding, the nature of communication is biased by the ban on subscriber support, away from minority taste messages.

Red Lion and The Fairness Doctrine

For all the reasons indicated in previous sections of this chapter, the government has decided to make sure that television is fair. And who could be against a fairness doctrine?

The fairness doctrine was invented by the FCC and only later enshrined in the organic statute of communications regulation.[42] It is to be distinguished from the "equal time" provision for political candidates. The fairness doctrine says: (1) Licensees must, as part of their public service obligation, give appropriate coverage to controversial issues of public importance; (2) In doing so, the licensee must present all "sides" of opinion on such issues, and (3) the station itself is responsible for the airing of opposing views; there is no implied much less express right of direct access by any group.

In practice, the fairness doctrine probably discourages controversial TV programming, particularly investigative journalism. The reason is that the airing of "all sides" of an issue can be very expensive, and the licensee leaves itself open for the resulting contingent costs of litigation before the FCC and the courts. Any group which thinks itself disadvantaged by a licensee's treatment of some issue files a

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42 See Communications Act of 1934 as amended, sec 315.

complaint with the FCC, which must then review the actual content of the program in order to adjuicate the dispute. If the complainant is upheld, the licensee can be ordered to present the views of the complainant. This kind of detailed review of program content has become increasingly frequent over the years.[43]

The practice of regulation of program "fairness" by the government is certainly antithetical to the spirit of the First Amendment. Nevertheless, the constitutionality of the fairness doctrine was upheld by the Supreme Court in 1968 in the Red Lion decision, whose theory was outlined earlier. This decision gave the FCC not merely the right but the obligation to regulate broadcast content.

There are other ways in which the FCC regulates program content. An important one is the license renewal process, in which the overall record of the station is reviewed through "public interest" glasses. Another is through the operation of such rules as the "prime time access" decision, barring network or off-network programming from the 7:30-8:00 time period. The Commission entertains, and grants, "waivers" of this rule to certain programs, such as "National Geographic,"* The effect is direct content regulation of programming.

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43 The FCC received 1,124 fairness doctrine complaints in fiscal 1971.

* See FCC release 73-707 (7/2/73).

or more often: someone
or some idea unfairly treated
has a way of "getting back"
in the terms of the system, of
"setting the record straight."
In some reasonably comparable way.
We can do this in print, so the argument goes,
by buying an ad, printing his own paper, etc. But the
character of print means his answer is there in B&W
for all who care to see. But TV is ephemeral &
"reasonably comparable" might well mean
"said out to the same size audience for
the same time & attention" as
the original attack. But
note that this goes
on the current
structure of TV
industry.

The fairness doctrine and the related content-regulating activities of the FCC are not only antithetical to freedom of expression, they are quite unnecessary as tools designed to achieve the appearance of freedom.[44] The rationale of these devices, it must be remembered, is a scarcity of licenses and concomitant "power" in the hands of broadcasters. Never mind that this state of affairs is itself unnecessary and artificial; there are other ways than direct content regulation to deal with it. One way is through a direct right of paid access for editorial announcements, or even full fledged common carrier access obligations. Another is to increase competition in broadcasting directly by removing the present barriers to entry. This would eliminate any rationale for a departure from the laissez faire interpretation of the First Amendment.

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44 Or, more to the point, no one has claimed that freedom necessarily results in "fairness" in programming. Freedom to say what one likes means, among other things, freedom to be unfair. Fairness comes in, if at all, through the notion that a system of freedom of expression will result in tendency toward fairness in political and private actions. A corollary of this is that the FCC might somewhat ease its impingement on freedom by considering whether its licensees taken as a group in some area (geographical or intellectual) achieve "balance," rather than enforcing such obligations on each licensee individually. A politically conservative radio station in Media, Pennsylvania, was recently forced off the air because its own programs were not "fair," without regard for its place in the spectrum of opinion available to the citizens of Media.

What would a common carrier, rate unregulated market lead to? rate reg?

But there is a connection between diversity & political pressures: "something for everyone" Thus "public interest" test of govt reg. TV tends strongly toward political rather than economic or freedom of expression objectives & character

Access and Diversity

The public interest in TV programming is often interpreted by the Commission to mean diversity in programming, and the presentation of a diversity of views on public issues. In practice, program diversity means that stations must air at least some regular programs in categories which the Commissin likes but which are not profitable. In this context, "not profitable" means that there is a small or negligible audience for the programs. Examples include local public affairs and religious programs. At license renewal time, the amount of broadcast hours devoted to these programs in a "composite week" must be reported to the Commission.[45]

We discussed the poverty of the concept of program diversity in Chapter 1 above. There is no necessary relationship between diversity and either economic efficiency or freedom of expression. Moreover, the kind of diversity introduced in practice by these rules is limited to obscure times of the day and week.

What does make some kind of sense is diversity of sources of programming; this is clearly tied to the freedom of access to the medium. Certainly this is more relevant to the First Amendment issue. From the economic point of view, what matters is the extent to which programming approximates that which would maximize consumer welfare -- those programs which would result under pay television, for instance.

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45 See 43 FCC 2nd 1-178.

The issue of access* is fundamental to the constitutional question. Granted the (erroneous) theory of frequency scarcity, the natural policy conclusion is the necessity of a right of access at non-discriminatory prices. To be sure, these prices will reflect the artificial scarcity of outlets in television, but that is a subsidiary problem. The constitutional issue would be fully satisfied by a right of paid access to television transmitting stations, and an end to control of programming both by licensees and by the government. Could such a system work? + how can we get there if it would?

The answer depends on the extent to which there exist externalities over time among programs, and to a lesser extent on the degree to which the price of access systematically excludes a particular range of views.

If the audience for a program on a channel is a function not only of the content of that program but of preceding and succeeding programs, then externalities do exist, and can lead to distortions of incentives in a system of paid access. Certainly television executives now believe that these externalities are important. Whether they would also be important in a common carrier system is an open question. AS to prices, it must be remembered that one of the important functions of prices is to exclude transactions which are uneconomic. In television, the artificial scarcity of VHF licenses will mean that prices will be higher than otherwise, and more people will be excluded

*By "access" here I mean the opportunity to employ the mean of transmission (the airwaves), not the opportunity to insert one's message into the midst of an edited collection of messages prepared by some one else. The distinction is somewhat blurred when we consider marginal changes in the existing system as opposed to wholesale reform.

who should not be; this is inefficient. Whether there will be a systematic content-related bias to this exclusion is a more difficult question.

If the access is gained under current conditions, then only programs which will survive under advertising support will appear. These will be different from present ones only if the menu of programs necessary to maximize profits on a given number of channels under advertiser support is not "unique" -- that is, if two or more programs are close substitutes economically even though they represent different intellectual interests or political slants. It is precisely under these conditions that a right of paid access is crucial to First Amendment freedoms, and where government regulation of private monopolists is most clearly unhealthy.

The immediate effect of a change to a system of paid access would be the creation of new firms to serve as brokers between stations or networks and program producers and advertisers. These firms would assemble a group of advertisers for a particular program or series of programs, buy air time, and purchase the program. It is not unlikely that these firms would be large advertising agencies. Depending on regulatory policies regarding the packaging of units of airtime,[46] there would also

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46 It matters whether, for instance, access can be bought only in 3-hour "chunks", or 3-minute units. The continuity problem suggests something closer to the former.

be groups prepared to buy time for editorial announcements -- the broadcast of opinion or propaganda. Wealthy organizations will be better able to do this than poor organizations, reflecting both the popularity of the organizations and the underlying distribution of wealth in society. If this is inequitable it is no less inequitable than the commercial opportunity to buy newspaper space or to have access to the mails and printing presses of the nation, and it reflects a broader social problem than can be dealt with in the context of television alone.

Is the television medium "too powerful" to allow freedom of access? Would society be less stable if anyone with the money could buy an hour of network time? Certainly there is a mystique surrounding the medium which suggests this. How much would it cost to have an impact? Currently, a one-hour program of sufficient popularity to attract 1/3 of the TV audience (roughly 15,000,000 households) costs $250,000. A group wishing to present its views to such an audience once a week would have to spend about $10,000,000 per year (39 weeks of the TV "season"). This is nearly enough to start up a major city daily newspaper, and it would represent only 1/84 of the prime-time network channel hours per week availableon television. It does not seem likely that this represents much of a threat to liberty. The real danger lies in the fact that today three organizations each controls one-third of these channel-hours, and the government controls, more or less directly, 100%.

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superficial
& unconvincing

Just as in newspapers, scarcity of outlets in the means of transmission requires a system of unregulated access. But we do not need to grant the premise of scarcity in broadcasting. Newspaper printing and distribution contain a degree of "natural" monopoly. There is nothing in broadcast technology which is naturally monopolistic. The question of access to television station transmitters need not be addressed at all if we can eliminate the government-created scarcity of such transmitters. Thus, a policy directly consonant with a literal interpretation of the first amendment in broadcasting is the creation of a system of private property rights and a free market in the electromagnetic spectrum. Nearly everyone agrees that this is utopian, which is to say impossible, because of the political power of the broadcast industry. It is nevertheless a goal worth fighting for if we really believe in freedom of expression.

Network Power

The FCC's decision to pursue localism in license allocation, rather than a system of regional or national control, has led quite ironically to a greater degree of centralized national concentration than would have existed if the FCC had eschwed localism. The reason is that the economics of broadcasting (given consumer preferences) dictate nationally shared programming, so that the "natural" equilibrium is national coverage. But localism requires a strict limit to the number of local outlets, and this in turn limits the number of possible parallel national services.[47] In practice, there can only be three national networks because there are generally only three acceptable local outlets.[48] If localism had not been a goal, the regional system proposed in the Dumont Plan could have produced half a dozen or more national networks.

Affiliation with a network is the most profitable choice available to local stations. As a result, the decentralization of control which might have resulted from localism is utterly frustrated in practice, even though the FCC clings stubbornly to the old theory. Three organizations control what people shall see and hear on television, the "most powerful" of media.

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47 The "strict limit" results both from the frequency allocation problem and from the economic viability side, given only advertiser support.

48 See Park [ ] for analysis of the viability of a fourth network.

see Lou Brown's books
for evidence if any.

Whenever there are only three competitors in a market, there exists both the incentive and the opportunity for non-competitive, collusive behavior. Such behavior is illegal under the antitrust laws, but is almost impossible to prevent in its subtler forms without structural changes in the industry. The result is that the networks compete and collude in various dimensions of their economic game. In this case, it seems likely that the networks end up spending too much money on programs, and producing too few individual episodes of these programs.[49]

But the implications of fewness in networking go far beyond economic consequences. The three networks are interbred; they are located physically close together; their standards of success, particularly in journalism, are virtually identical, and they are heavily influenced by the same external opinion leaders -- the New York Times, the Washington Post, the Columbia Journalism Review. Journalistic decisions, and subjective policy decisions about program content are as a result likely to be made on remarkably similar criteria and by men with nearly identical aspirations and environments. This is unhealthy from the First Amendment viewpoint, and it facilitates the exercise of government control. It would be far less dangerous to have such organizations be more numerous, more geographically and intellectually and culturally decentralized.

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49 See Owen, Beebe, Manning[,] Chapter 4. This is not necessarily bad for viewers; presumably at least some people would prefer more expensive programs to more original programs, provided that the added expense is reflected in program quality values rather than higher rents to scarce talent.

Can an AT suit argue
(successfully) that the AT
laws supersede the provision
of the 34 CA—that B ('no merit comm cases?

The networks do not represent a cabal of evil men intent on dictating social and political attitudes. On the contrary, they regard themselves as responsible seekers of objectivity, and even slaves of the fickle audience. More important, their behavior is entirely consistent with the incentives produced by the structure of their industry and its regulators. The difficulty lies in the policies which produced that structure and regulation. These policies have created an unfortunate and dangerous nexus of power in society. This situation is all the more dangerous when it is exercised unself-consciously, because it is then less visible and more self-righteous.

Aside from wholesale revision of the system of television allocations, there are two levels of policy available to deal with this problem. The first is the encouragement of new technology, such as cable television, which decentralizes and attenuates network power.[50] The other is to break up the networks by antitrust action.[51] Both of these approaches would of

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50 That is, to create more channels and therefore more competition in the marketplace of ideas.

51 Antitrust action against the networks is by far the most politically feasible approach. The present Justice Department suit is however untenable: it alleges monopsony power in the program markets, and seeks to keep the networks out of prime time program production, an end already accomplished by the FCC's prime time access rule. The correct approach is structural. For instance, the networks might be forced to sell time on their systems to others, or individual stations might be forbidden to affiliate with any one network more than (say) one day per week. Remedies of this type preserve the scale economics of networking while allowing additional networks to appear.

Expand: More nets offend
govt, less govt can do.
Structurally. Why does it
not follow that govt can do
less program reg? (Because
that is a political interest group
brokering process, rather than
govt "hurting" business to being
big & powerful (anti-govt)?)

course be opposed by the networks. Ironically, the possibility of engendering such a policy change is small precisely because it can so easily be made to appear to be government retribution for network antagonism to administration policies.[52] Thus, the unhealthy symbiosis between media and government perpetuates itself.

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52 The first Justice Department antitrust suit against the networks was dismissed without prejudice precisely because it appeared to be tainted by political motivation. It was, however, immediately refiled.

Radio Today

The Red Lion decision upholding the constitutionality of the fairness doctrine on the grounds of the scarcity of frequencies was a radio station case, not a television case. This is curious because it is in radio broadcasting that the FCC has chosen not to create a significant scarcity of licenses. There are more than 7,500 radio stations on the air in the United States, and most citizens can receive at least a dozen stations on home or car radios. With the possible exception of magazines, radio is the most numerous of the media. For financial data on the industry, see Tables 15-20.)

The numbers of competing stations in radio provide an attractive opportunity for instructive contrasts with television. Some phenomena in radio seem to be closely associated with the increased "fragmentation" of the audience associated with greater numbers of competing stations. There seems, for instance, to be a somewhat wider range of program "types" in radio, while "duplication" still persists. Local advertising and locally-oriented content is more important, and national networking somewhat less important in radio than in television.

There is more controversy and more extreme points of view on radio. There is no equivalent on television of the Pacifica stations or the McIntyre stations.[53] Competition in radio is relatively robust, and aside from the threat of FCC intervention

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53 Far-left and right, respectively.

TABLE 15

Sales, costs and profits of [illegible]

Revenue and expense items for all AM and AM-FM[1] stations reporting financial data, 1973 (in thousands of dollars)

	Individual items	*Totals*[2]
Broadcast revenues		
A. REVENUES FROM THE SALE OF STATION TIME:		
(1) Network		
Sale of station time to networks:		
Sale of station time to major networks, ABC, CBS, MBS, NBC (before line or service charges)	$ 9,242	
Sale of station time to other networks (before line or service charges)	2,250	
Total		11,492
(2) Nonnetwork (after trade and special discounts but before cash discounts to advertisers and sponsors, and before commissions to agencies, representatives and brokers):		
Sale of station time to national and regional advertisers or sponsors	345,096	
Sale of station time to local advertisers or sponsors	1,069,451	
Total		1,414,547
Total sale of station time		1,426,039
B. BROADCAST REVENUES OTHER THAN FROM SALE OF STATION TIME (after deduction for trade discounts but before cash discounts and before commissions):		
(1) Revenues from separate charges made for programs, materials, facilities and services supplied to advertisers or sponsors in connection with sale of station time:		
(a) to national and regional advertisers or sponsors	2,644	
(b) to local advertisers or sponsors	11,293	
(2) Other broadcast revenues	12,829	
Total broadcast revenues, other than from time sales		26,766
C. TOTAL BROADCAST REVENUES		1,452,805
(1) Less commissions to agencies, representatives and brokers (but not to staff salesmen or employes) and less cash discounts	137,620	
D. NET BROADCAST REVENUES		1,315,185[3]

	Individual items	*Totals*
Broadcast expenses		
TECHNICAL EXPENSES:		
Technical payroll*	$ 65,579	
All other technical expenses	40,199	
Total technical expenses		105,778
PROGRAM EXPENSES		
Payroll* for employes considered "talent"	—	
Payroll* for all other program employes	231,374	
Rental and amortization of film and tape	1,183	
Records and transcriptions	5,523	
Cost of outside news services	22,953	
Payments to talent other than reported above	8,654	
Music license fees	33,653	
Other performance and program rights	13,526	
All other program expenses	42,289	
Total program expenses		359,156
SELLING EXPENSES:		
Selling payroll*	155,595	
All other selling expenses	87,675	
Total selling expenses		243,270
GENERAL AND ADMINISTRATIVE EXPENSES:		
General and administrative payroll*	142,140	
Depreciation and amortization	60,402	
Interest	34,029	
Allocated costs of management from home office or affiliate(s)	31,091	
Other general and administrative expenses	212,238	
Total general and administrative expenses		479,901
TOTAL BROADCAST EXPENSES:		1,188,104
Broadcast income		
Broadcast revenues		$1,316,117[4]
Broadcast expenses		1,189,758[4]
Broadcast operating income or (loss)		126,359
Total of any amounts included in expenses which represent payments (salaries, commissions, management fees, rents, etc.) for services or materials supplied by the owners or stockholders, or any close relative of such persons or any affiliated company under common control		80,004

*Payroll includes salaries, wages, bonuses and commissions. Total Payroll: $594,689

1 Includes: 2,854 AM and 1,413 AM-FM combination stations. Does not include 361 FM stations that are associated with AM's but which reported separately.

2 Last digits may not add to totals because of rounding.

3 Includes $45,346,000 from barter and trade-out transactions.

4 Stations reporting less than $25,000 in total revenues are not required to report items in revenues and expenses but are required to report income. Therefore, totals in revenues and expenses are somewhat lower than totals in income.

Revenue and expense items for all FM stations[1] reporting financial data, 1973 (in thousands of dollars)

	Individual items	*Totals*[2]
Broadcast revenues		
A. REVENUES FROM THE SALE OF STATION TIME:		
(1) Network		
Sale of station time to networks:		
Sale of station time to major networks, ABC, CBS, MBS, NBC (before line or service charges)	$ 264	
Sale of station time to other networks (before line or service charges)	58	
Total		$ 322
(2) Nonnetwork (after trade and special discounts but before cash discounts to advertisers and sponsors, and before commissions to agencies, representatives and brokers):		
Sale of station time to national and regional advertisers or sponsors	34,967	
Sale of station time to local advertisers or sponsors	129,543	
Total		164,510
Total sale of station time		164,831
B. BROADCAST REVENUES OTHER THAN FROM SALE OF STATION TIME (after deduction for trade discounts but before cash discounts and before commissions):		
(1) Revenues from separate charges made for programs, materials, facilities, and services supplied to advertisers or sponsors in connection with sale of station time:		
(a) to national and regional advertisers or sponsors	55	
(b) to local advertisers or sponsors	610	
(2) Other broadcast revenues	2,708	
Total broadcast revenues, other than from time sales		3,373
C. TOTAL BROADCAST REVENUES		168,205
(1) Less commissions to agencies, representatives and brokers (but not to staff salesmen or employes) and less cash discounts	16,208	
D. NET BROADCAST REVENUES		151,996[3]

	Individual items	*Totals*[2]
Broadcast expenses		
TECHNICAL EXPENSES:		
Technical payroll*	$ 7,478	
All other technical expenses	6,788	
Total technical expenses		$ 14,267
PROGRAM EXPENSES:		
Payroll* for employes considered "talent"	—	
Payroll* for all other program employes	28,901	
Rental and amortization of film and tape	593	
Records and transcriptions	1,240	
Cost of outside news services	1,977	
Payments to talent other than reported above	701	
Music license fees	3,657	
Other performance and program rights	884	
All other program expenses	4,772	
Total program expenses		42,725
SELLING EXPENSES:		
Selling payroll*	21,237	
All other selling expenses	16,341	
Total selling expenses		37,578
GENERAL AND ADMINISTRATIVE EXPENSES:		
General and administrative payroll*	16,701	
Depreciation and amortization	11,240	
Interest	4,516	
Allocated costs of management from home office or affiliate(s)	4,569	
Other general and administrative expenses	29,220	
Total general and administrative expenses		66,245
TOTAL BROADCAST EXPENSES		160,816
Broadcast income		
Broadcast revenues		$153,615
Broadcast expenses		164,464
Broadcast operating income or (loss)		(10,849)
Total of any amounts included in expenses which represent payments (salaries, commissions, management fees, rents, etc.) for services or materials supplied by the owners or stockholders, or any close relative of such persons or any affiliated company under common control		7,405

*Payroll includes salaries, wages, bonuses and commissions. Total payroll $74,317

1 Includes 361 FM stations that are associated with AM stations but that reported separately and 616 independent FM stations.

2 Last digits may not add because of rounding.

3 Includes $7,583,000 from barter and trade-out transactions.

4 Stations reporting less than $25,000 in revenue are not required to report items in revenues and expenses, but are required to report in income. Therefore, totals in expenses are somewhat higher than the totals reported in revenues and expenses.

( ) Denotes loss.

Source: FCC data.

T. & C. 16

Commercial radio stations in operation in 1973

	AM	AM-FM (filing a combined report)[1]	Total AM, AM-FM	FM associated with AM-FM combination but filing a separate report[2]	FM independent	Total radio[3]	Grand total[3]
Stations in operation on Dec. 31, 1973							
Full-year operation	2868	1429	4297	349	604	5250	6679
Part-year operation	43	11	54	13	41	108	119
Total	2911	1440	4351	362	645	5358	6798
Stations not reporting[4]	63	27	90	1	30	121	148
Total stations reporting	2854	1413	4267	361	616	5244	6657

1 AM-FM stations filing a combined report are counted as one station.

2 Although these stations are associated with an AM-FM combination they are counted as separate.

3 Figures in this column count AM-FM combinations as *two* stations.

4 Stations that are counted as not reporting include those stations that were licensed but silent for the entire year, those commercial stations that obtained most of their revenues from contributions rather than time sales, and those stations that filed too late to be included in this report.

5. Note that there are in addition about 800 educational radio stations and a number of "carrier current" operations.

Source: FCC data.

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Table 17

8. Money in and out, including the networks

Broadcast financial date of nationwide networks and 4,267 AM and AM/FM stations, 1973 (in thousands of dollars)

Broadcast revenues, expenses and income	*Nationwide networks*[1]	*Percent change from previous year*	*18 owned-and-operated AM stations*[2]	*Percent change from previous year*	*4,249 other AM and AM/FM stations*[3]	*Percent change from previous year*	*Total Networks and stations*	*Percent change from previous year*
Sales to advertisers for time, program talent, facilities, and services								
Network sales	$ 56,974	(10.1)						
Deduct: Payments to owned-and-operated stations	829	(18.2)						
Deduct: Payments to other affiliated stations	8,598	(1.6)						
Retained from network sales	47,546	(11.4)	$ 829	(12.6)	$ 10,662[4]	9.8	$ 59,038	(8.3)
Nonnetwork sales								
To national and regional advertisers	–		42,508	1.5	305,232	(3.7)	347,740	(3.2)[7]
To local advertisers	–		30,324	8.8	1,051,351[5]	8.3	1,081,675	8.2
Total nonnetwork sales	–		72,832	4.4	1,356,584	5.4	1,429,416	5.2
Total sales to advertisers	47,546	(11.4)	73,662	4.2	1,367,246	5.4	1,488,454	4.5
Sales to other than advertisers	1,643	(4.1)	601	26.3	12,228	6.5	14,473	5.2
Total sales	49,190	(11.1)	74,263	4.3	1,379,474	5.4	1,502,927	4.6
Deduct: Commissions to agencies, representatives, etc.	8,458	(10.5)	12,651	1.5	124,969	1.5	146,078	0.5
TOTAL BROADCAST REVENUES	40,732	(11.2)	61,612	4.9	1,254,505	5.8	1,356,849	5.0
TOTAL BROADCAST EXPENSE	43,813	4.4	52,501	7.7	1,137,256	8.1	1,233,570	7.7
TOTAL INCOME (before federal income tax)	(3,081)	6	9,111	(8.4)	117,248	(12.6)	123,279	(16.2)

[1]CBS, MBS, NBC and ABC's three AM networks and one FM network.

[2]Includes 14 AM stations and four AM/FM combinations. Fourteen of the owned and operated FM stations are excluded from this table for 1973. The 1973 revenues of the 14 FM owned and operated stations totaled $9.5 million and their expenses totaled $12.4 million.

[3]Excludes 347 FM stations that are associated with AM's but reported separately. The 1973 revenues of these stations totaled $480.0 million; expenses totaled $45.9 million.

[4]Includes $2,250 thousand in compensation from regional networks. The balance differs from the amount reported by the networks on line 4 because of differences in accounting methods.

[5]Since stations with less than $25,000 in revenues do not report a detailed breakdown, the total revenue of those stations is included in this item. Therefore, a small amount of network and national non-network time and program sales may be included here.

[6]Profit of $3,929,000 in 1972.

[7]A portion of the apparent decline in sales to national and regional advertisers is due to a shift in the way stations classified sales in 1973. Some sales formerly classified as national/regional were classified as local for 1973. As much as $4.8 million of the decline in national/regional sales may be accounted for by this re-classification.

( )Denotes loss

*Although the networks owned and operated 20 stations in 1972, the percent change is calculated only for those 18 stations owned and operated by networks in both 1972 and 1973.

NOTE: Last digits of detailed dollar figures may not add to totals due to rounding.

Source: FCC data.

TABLE 18

RADIO STATION PROFITABILITY - 1973
NUMBER OF STATIONS REPORTING PROFIT OR LOSS, BY REVENUES

AM AND AM/FM

Revenues / Profit (Loss)	Profit: Over 500,000	Profit: 10,000 500,000	Profit: 0 10,000	Loss: 0 25,000	Loss: 25,000 500,000	Loss: Over 500,000	Total
Over $1,000,000	71	116	3	2	16	6	214
$50,000-$1,000,000	0	1,780	853	744	404	10	3,791
Under $ 50,000	0	13	70	107	17	0	207
Total	71	1,909	926	853	437	16	4,213

FM

Over $1,000,000	1	5	0	0	0	0	6
$50,000-$1,000,000	0	119	92	101	136	2	450
Under $ 50,000	0	1	17	71	31	0	120
Total	1	125	109	172	167	2	576

NOTE: FM stations "associated" with AM's but reporting separately included with FM's.

Source: FCC data reported in Broadcasting 1/20/75 p. 56

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Tab. 19

9. People and property

1972 employment and investment in tangible broadcast property of nationwide networks, their 18 owned-and-operated stations[1] and other AM and AM-FM radio stations.

Employment	*Nationwide networks*[3]	*18 Network owned-and-operated stations*[1]	*Other stations*	*Total*
Full time	851	1,398	49,420	51,669
Part time	18	92	15,578	15,688
Total	869	1,490	64,998[2]	67,357
Investment in tangible broadcast property				
Original cost (thousands of dollars)	10,653	17,282	857,786[4]	885,721
Depreciated cost (thousands of dollars)	4,187	6,932	437,664	448,783

[1] Includes 14 AM's and four AM-FM combinations
[2] Includes 4,241 AM and AM-FM stations
[3] CBS, MBS, NBC and ABC's three AM networks and one FM network.
[4] Includes 4,221 AM and AM-FM stations.

Tab. 20

10. Cost accounting

1973 broadcast expenses of nationwide radio networks, their 18 owned-and-operated stations and 4,194 other AM and AM-FM stations, reporting revenues of $25,000 or more (in thousands of dollars)

Type of expense	*Nationwide networks*[1]	*18 Network owned-and-operated stations*[2]	*Other stations*[3]	*Total*
Technical	$ 3,405	$ 8,012	$ 98,765	$ 109,182
Program	28,428	18,864	340,292	387,584
Selling	7,607	14,130	229,140	250,877
General and administrative	4,373	11,494	468,406	484,273
Total broadcast expenses	43,813	52,501	1,135,603	1,231,917

[1] CBS, MBS, NBC and ABC's three AM networks and one FM network
[2] Includes 14 AM stations and four AM-FM stations filing a combined report
[3] Includes 2,790 AM stations and 1,404 AM-FM stations filing a combined report. Does not include 361 FM stations that are associated with AM's but reported separately

NOTE: Last digits may not sum to totals because of rounding.

Source: FCC data reported in Broadcasting 1/20/75 p.60

there is little difficulty in gaining access to the medium at reasonable prices.* To be sure, the distortions caused by advertising support and by FCC regulation persist, but both seem to be attenuated by the number of competitors, even leaving aside competition from other media.

These observations suggest two propositions. The first is that there is no sane rationale for continued government content regulation in radio. The second is that an increase in the number of competing TV channels, to the extent it resulted in a situation similar to that in radio, would be a desirable thing. One reason that radio appears less socially powerful than television is precisely because it is less concentrated.

There is no scarcity, artificial or otherwise, of radio station "voices."[54] There is robust competition, and extensive access, for economic reasons, despite FCC regulation which is theoretically identical to television. The degree of robustness of debate on controversial issues is inhibited only by the FCC, which seeks in a desultory manner to require balance within the programming of each station, rather than across the spectrum of stations. There is an active market in radio licenses; most transfers receive pro forma FCC approval. Taking away the FCC's attempts to control radio content, one has what must be the

*But see such examples of FCC interference as the WUHY case, 24 FCC 2d 408 (1970).

[54] There may be local exceptions to this statement.

closest approach to uninhibited freedom of expression possible in the absence of subscriber payment. The case for deregulation of radio is overwhelming. When this suggestion was made to the FCC several years ago,[55] the Commission responded by undertaking a program of re-regulation which involved reductions in the more onerous technical and reporting regulations, but which left the content regulation and license renewal policies unchanged.* To be fair, there is a serious question whether in view of Red Lion the Commission or even the Congress can choose to deregulate radio.

Would we be better off with a television medium which resembled the radio industry in structure? From the point of view of freedom of expression we would certainly be better off. From the economic point of view, we would probably be better off, but not so well off as with pay television in addition.

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55 Whitehead speech to IRTS.

*See FCC 73-694 (Released 7/2/73) and FCC 72-967 (Released 11/2/72), "In the Matter of Radio Reregulation." Also see Leslie Cheek III, "An Analysis of Proposals to Deregulate Commercial Radio Stations," Fed. Comm. B. J. xxv no. 1 (1972).

Public Broadcasting

The intellectual community has never been happy with commercial television in the United States. The number of academics claiming that they never watch television is exceeded only by the number of antennae on their homes. Because of advertiser support and limited channels, television caters to mass tastes. Intellectuals by definition do not share these tastes.

This dissatisfaction was for many years reflected only in the theory of broadcast regulation and efforts to get the FCC to require the broadcasters to do "better." This is the essence of Newton Minnow's "vast wasteland" speech.[56] Finally, in 1967, the Carnegie Commission proposed and Congress accepted the idea of a system of "public" broadcast stations.[57] The idea was to create local stations which were not forced by the profit motive of commercial broadcasting to produce the programs of the wasteland. Public broadcasting was to produce quality programming, to be a medium of excellence. The instructional programming of the pre-existing "educational" stations which served as a starting point for public broadcasting was deemphasized. (For an outline of the financial structure of the system, see Tables 21-23.)

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56 Minnow [ ].

57 Carnegie Commission [ ]; Public Broadcasting Act of 1967.

TABLE 21

Income of Public TV Stations, Fiscal 1971

Source	Amount (000)	Percent of Total
Federal Government	$ 8,935	6 %
Public Broadcasting Agencies	14,766	11
Institutions of Higher Education	9,554	7
State and Local Governments	66,613	47
Foundations	15,881	11
Auctions, individuals, and all other	25,067	18
Total:	$140,816	100 %

Source: CPB

TABLE 22

Corporation for Public Broadcasting Funds (Fiscal 1973)

Income	Thousands of Dollars	
Federal Appropriations	35,000	
Federal Grants & Contracts	21	
Non-Federal income	3,535	
Carry over from prior year	3,634	
Total		42,190
Expenses (Budget)		
Programs for public TV	15,892	
Distribution of TV Programs (PBS)	9,250	
Production & Dist. of Radio Programs	3,500	
Research	602	
Grants for Community Service	6,626	
Other Grants	1,941	
Administration	2,619	
Total		40,430

Source: CPB

TABLE 23

Federal Funding for Public Broadcasting

(millions of dollars)

	Corporation for Public Broadcasting		Educational Broadcasting Facilities Act	
Fiscal Year	Authorization	Appropriation	Authorization	Appropriation
1963-1967 (total)	-	-	32	32
1968	-	-	11	0
1969	9	5	13	4
1970	20	15	15	5
1971*	35	23	15	11
1972*	35	35	15	13
1973**	65	65	25	13
1974**	90	45		
1973*	45	35***		

* Two-year authorization
** Two-year authorization; vetoed
*** Continuing resolution

The concept of localism was almost immediately abandoned, and a network (PBS) created. The economic reasons for this mirror the rationale of networks in commercial broadcasting; given limited funds, sharing of programs is strongly indicated. But in this case localism has an additional dimension -- it provides a safety mechanism to insulate the system from political intervention which would naturally accompany the expenditure of federal funds. Federal funding means that Congress and the President have a tool and a responsibility for examining the performance of public broadcasting. The centralization of program decisions in Washington by a national network makes it easier to wield this power of intervention. There is considerable danger that the public broadcasting system can then be an instrument of the state, and this is certainly contrary to the principles of freedom of expression.

The public broadcasting system was essentially a liberal concept, and it came into inevitable and immediate conflict with the Nixon administration, nicely illustrating the relationship between public broadcast content and political forces at their most dangerous level. The upshot, when the dust had settled, was a plan to partially decentralize control of program decisions (localism) along with long term funding by Congress.[58]

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58 For discussion of the controversy, see Owen, Beebe, Manning [ ] , Chapter 7.

Is public broadcasting necessary? There are certainly deficiencies in the present system which a public corporation might, if it wished, help to remedy. This would require production of programs against which the commercial system is biased, despite their economic desirability. But these are not necessarily the same programs which will satisfy the intellectual elite which patronizes public broadcasting and dominates its decision-making. More to the point, public broadcasting is a singularly inefficient way to remedy the defects in the commercial system: it occupies valuable spectrum allocations with programs which have miniscule audiences,[59] it is (deliberately) non-responsive to consumer tastes, and it is structured in a way which invites dangerous First Amendment confrontations. The principal merit of the system is that it is one of the few reforms which are politically feasible, and this is so precisely because it does not threaten the audiences and profits of commercial broadcasters. Effective reform requires heavy threats to those things.

Public broadcasting as presently structured is not a safe or an effective remedy for the defects of commercial television. This does not necessarily mean that there is not a justification for federal subsidization of certain kinds of "merit good" programming. But one can imagine more efficient and less dangerous ways to accomplish this objective. For instance, federally

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[59] If the VHF educational allocations were available for commercial use, a fourth commercial network might well be viable. See Crandall [ ].

funded local public committees might buy time on commercial stations for public service programs, or the National Endowment for the Arts might subsidize "high quality" entertainment programming on commercial stations.[60] But any remedy for the inefficiencies and inequities of the commercial system would almost certainly have to hurt to be effective, and public broadcasting does not hurt commercial broadcasters.

Program choice in public broadcast ought to be decentralized for political reasons. But the decentralized decision-makers must, for economic reasons, be given the option of purchasing national programming. This requires that federal appropriations flow through directly to local stations, but that there be a market in which the stations can purchase rather than produce programs. On a more fundamental level, program choice might usefully be made more responsive to viewer welfare, and less responsive to the notions, put forward by philanthropic institutions, of what people "ought" to see. Careful study of data from cable television and pay-TV experiments, for instance, could produce reasonable estimates of what programs, or program types, are most needed to offset the distortions of advertiser-supported commercial television. These programs may not be operas, ballets, and Shakespeare. Even if they are, public

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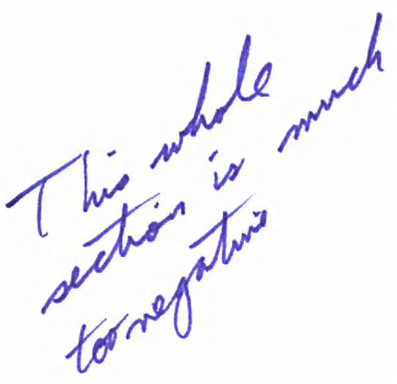
60 This would of course require changes in the communications regulations requiring commercial stations or networks to accept such programs at standard rates. This would be a good precedent for more open access generally.

support of a separate network of stations may very well be the wrong way to produce them.



Cable Television

The idea of delivering television by wire is not particularly startling.[61] It is, obviously, more expensive than over-the-air signals.[62] Because it is more expensive it has developed mainly as a supplement to the broadcast system, helping to satisfy the consumer demand for television choked off by the artificial restriction of broadcast frequencies. It does this in two ways. The original function of cable was to supply TV signals to viewers who could not receive existing stations very clearly -- in remote or mountainous areas. However, cable operators quickly realized that their wires could carry lots of TV channels, not just the few allowed by the Commission in any area. So they began to import TV signals from distant cities. Subscribers were willing to pay for this service, and a major controversy was born.

The essence of the controversy is that cable, with its unlimited channel capacity, threatens the profits of broadcasters

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61 Cable television uses a coaxial cable. The capacity of such a system depends on the amplifiers used, but new systems typically can carry about 20 TV channels. Theoretical capacity is much higher. Telephone wires can not be used to transmit commercial TV quality signals; Picturephone service has a lower resolution than commercial television, and requires four wires.

62 At least, cable is more expensive than over-the-air transmission if only a few channels are involved. The cost of a cable system varies widely depending on subscriber density and local construction conditions. An initial investment cost of about $200 per subscriber is perhaps typical. If such a system has 20 channels and serves a community of 100,000 households, the cost is about $1,000,000 per channel, which is not greatly different than the cost of a TV tower and transmitter. Typical cable fees are $6 per month, plus an installation charge. There are now (1975) about 10 million cable subscribers, or 15% of all TV households.

whose markets had heretofore been protected from entry. More competition means smaller audiences and lower advertising revenues. The knife was turned in the wound by two Supreme Court decisions[63] interpreting the 1909 Copyright Act to allow distant signal importation without copyright liability. This brought the program producers down on the side of the broadcasters, an otherwise unnatural alliance.[64]

The FCC's behavior with regard to cable has been reprehensible. As cable began to threaten broadcasters profits, the FCC unilaterally asserted its jurisdiction over the industries, under the "ancillary services" doctrine discussed above. (The Supreme Court upheld the Commission in Midwest Video.) The Commission then proceeded to freeze cable growth for several years by barring any distant signal importation. In 1972, it issued a massive set of rules for cable, allowing some distant signals, and imposing heavy public service obligations on each system.[65] From the public's point of view, cable presents an opportunity for expanded choice and increased programming supply. There is no efficiency justification for the FCC's action, and only a tenuous equity argument supporting the Commission. The equity argument is that some

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63 Fortnightly and CBS v. Teleprompter.

64 Program producers generally favor cable TV and pay TV because of the implied increased demand for programs.

65 For a detailed history of cable regulations see Barnett ( ). For discussions of the 1972 rules, see Park ( ).

consumers may be hurt by cable. These would be consumers who now receive "free" over-the-air signals which would disappear because of cable competition.[66] It is not clear that such consumers would exist, or if they do, that their loss is commensurate with the gain to others from cable growth.

The remaining point to make about cable technology is that pay-television is much more practical with cable than with over-the-air signals, because the wire which carries the signal can also monitor program choices and provide for automatic billing, as with telephone calls.[67]

What is proper public policy with respect to cable? Some excellent suggestions are contained in the Report of the Cabinet Committee on Cable Communications, headed by former OTP Director Clay T. Whitehead. The Report recognizes the vertical stages of mass media message production (creation, editing, transmission) and points out that cable technology is likely to result in local natural monopolies at the transmission stage. (There are strong economies of scale in several dimensions of cable television construction and operation.) Accordingly, freedom of expression and economic competition will both be served by giving cable operators common carrier obligations -- making then in effect institutions like the post office or the telephone company.[68] Then

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[66] The argument is that local stations will lose so much audience to imported signals that advertising revenues would be insufficient to support them. But some stations must receive increased revenues from being imported, so there is no necessary reduction in the number of signals available to consumers, and the reverse is much more likely. This is however consistent with a reduction in the number of stations.

[67] See Owen ( ).

[68] Though not necessarily subject to rate of return regulation. We have no good evidence that consumers are better off when monopolies are subject to such regulaion, and there are plausible reasons to suppose that the reverse is true.

can be competition among message sources, any of whom can rent channel hours from the cable operators. Given the potentially large number of channels, there exists no rationale for regulation of the program sources or of program content. The Report also recommends the end of most present restrictions on pay-television by cable.

These seem to be exactly the right policies. Unfortunately, the Report recommends that they be implemented only at the time national cable diffusion reaches 50% of the population, and that the FCC meanwhile continue more or less on its present course. Given that course, it may be several decades, if ever, before cable does achieve 50% saturation of the population. Not surprisingly, good policy has difficulty engaging political reality. Worse still, if cable does ever reach 50% saturation, it will then likely possess sufficient political power to avert those parts of the Whitehead recommendations which will reduce its own profits, including the provision that cable operators themselves not control any programming. This in turn will provide the traditional rationale for continued federal regulation of content.

Cable technology is a first-class excuse for reform of our system of broadcast regulation. It provides the opportunity to insert competition into the industry, to increase freedom of expression, and to reduce or eliminate government regulation of message content. But it is only an excuse. The same ends can be achieved within the context of present technology, and

perhaps more cheaply. Cable is not necessarily the least expensive way to increase channel capacity and choice. Cable does provide a new political force, one which may eventually force an effective increase in competition. The great danger is that the political route to economic security for cable owners lies down the path of regulation, and there is no automatic mechanism providing for the withering of regulation when it is no longer required even by the theories criticized above.

With respect to such issues as cable, the FCC can be regarded as behaving very much like an automaton. The rules are these: Every regulated industry which encounters competition from an unregulated source can count on getting the threat under control by extending regulation to cover it. Thereafter, both entities will be protected by the regulators against each other so that catastrophic damage is impossible. The balance of rewards to each of the competing forces will reflect the political strength of the parties in Congress and the Executive Branch, taking due account of the role of public opinion in influencing each. Cable used to be at a considerable disadvantage vis a vis broadcasters in this balance, but it has now begun to acquire some political power. Still, it will be a long time before the local cable operator is as important to a Congressman as the local broadcasters and newspapers are. Whatever the

long run outcome, the effect is certainly to dampen significantly the rate at which cable can serve as a remedy to the problems of television. This is the way public policy is made in such cases, and there is very little that can be done about it.[69]

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69 See Owen ( ) in Park ( ).

Social and Cultural Effects: The End of History

Print journalism provides a permanent record of events, and to some degree reflects for posterity the tastes and conditions of culture and society. Indeed, journalism itself is history, albeit recent history. The broadcast media are the antithesis of history. Television is preoccupied with participation in events. The goal of television news, not always realized, is live "real time" coverage of events. In this it pretends to neutrality. But there is no record of events, no memory except the memory of the audience. All action is ephemeral. Moreover, the presence of media coverage profoundly affects the event. No event is the same with the cameras, lights, and technicians present. The coverage is obtrusive, and worse, easily manipulated. A "media event" is not a "real" event, in the pre-electronic sense.[70]

The technology and institution of television do not lend themselves to thought, but to action. Investigative journalism, for instance, the activity which seems to play such an important role in theories of the First Amendment, is nearly impossible on television. The medium is not an efficient conveyor of action-less facts. On the other hand, few print media can match the impact of TV coverage of police dogs attacking civil rights demonstrators, of a riot, or pictures of a starving child, or

70. Epstein J.

q. Harris (Monks)

Why leaving aside journ?
If the social power arg
applies for social & cultural,
it surely applies to news:
① OK for govt to shape social & cultural
media, but not news
② Ent prog is more powerful than news.
③ Threshold effect justifying banking FA
in social & cultural matters, but not news & politics

a wartime fire fight. The McLuhan doctrine is certainly relevant. But the medium without a memory has no pertinacity, and it does not, as its pundits claim, merely "mirror" reality. It changes reality, it sometimes creates reality, and it often ignores or submerges reality.

Now there is little doubt that the print media also affect reality, and that distortions, of a different kind, are introduced by the traditional reporting techniques. But we have to ask whether the peculiar biases of television, given the public's remarkable preoccupation with it, are consistent with theories of the First Amendment. Leaving aside journalism, are the social and cultural impacts of TV programming sufficiently dangerous and important to qualify departures from the principles of freedom of expression?

It must first be said that no one understands what these impacts are, or whether they really are dangerous. Despite volumes of research there is no agreement on the relatively narrow question, for instance, of the effect of televised violence on children.[71] Even if we did know that television has untoward social and cultural effects, it is far from clear that the correct policy is to give over into the hands of an increasingly powerful central government the right to regulate

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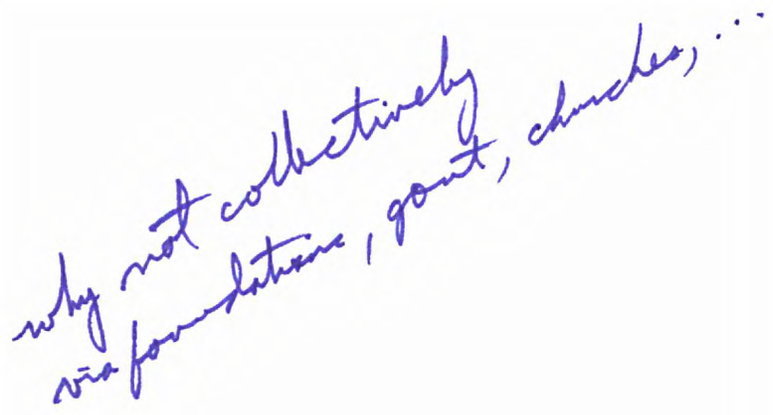
71 See Surgeon's General's Report ( ), ... (Chapter 8 in OBM).


why not collectively
via foundations, grant, churches, ...

those effects. If television is powerful and influential that is all the more reason to wish that government had no hand in it. On the contrary, one would wish that effective control were highly decentralized, both privately and publically. If television is an important social force, or a harmful one, it is too important to be left in the control either of bureaucrats or monopolists or both together. On the contrary, the medium must be democratized, its power dispersed over many decision-makers, especially consumers themselves. It becomes all the more important to ensure that the only programming which survives is that programming which people are willing, individually, to pay for, and to ensure that they have the widest possible range of choice of sources.

It is possible, though far from obvious, that there may be a social, collective interest in eliminating or modifying actual or potential pathological behavior in the television medium, behavior which might exist in the context of economic and political freedom. A non-controversial example is the need for copyright laws. A more controversial set of examples includes obscenity, libel, pornography, violence, and the like. It is not inconsistent for a democratic society to wish to deal with such phenomena. But it is critically important to choose carefully the manner in which this is accomplished. It can be

- why?
- weak & unconvincing
- Can we draw on some studies of bureaucratic or org. agency behavior?

But people want it both ways.

done through structural reform,[72] and it can be done if necessary by laws which are quite specific and which are enforced in the courts. But it can not be safely done by direct bureaucratic regulation, especially by bureaucrats with broad and ill-defined powers.

One must suspect that the peculiar place of television in our society, its unique "power and influence" are due in very large part to the fact that lots of people watch the same programs, because they have so little choice, rather than because television per se is uniquely influential. If everyone had access to 20 or 40 competing channels, with or without pay-TV, we would not all be watching the same news and entertainment programs, and the power of the medium as a whole to affect political decisions would surely be greatly attenuated.

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72 "Structural reform" means removing the institutional incentives which produce the pathological behavior, such as through antitrust action, or the introduction economic counterincentives, such as taxes or subsidies. Such measures are to be distinguished from regulations requiring judgemental enforcement by an administrative body, and which constrain actions or behavior which is economically rewarding.

Cross-Ownership and the Role of Antitrust

If television were not a regulated industry it would be a very obvious target of antitrust activity under the doctrine of the Associated Press case.[73] The network oligopoly is only one of the institutions which might be subject to attack. Another is pervasive newspaper-television station cross-ownership. The Justice Department has pressed the FCC to deal with this problem since 1968, but with little success. The situation neatly illustrates the problems of antitrust policy in the regulated industries.

About 30% of all TV stations are owned by newspapers in the same city.[74] Given the prevelent monopoly positions of newspapers, and the much vaunted "scarcity" of TV licenses, cross-ownership is an obvious affront both to economic competition and to freedom of expression, the latter being in this case far more important. There is evidence that joint ownership results, as common sense would suggest, in higher advertising prices charged by TV stations and newspapers than the prices charged in otherwise similar situations. This is a standard economic effect of a reduction in competition. The First Amendment effects are obvious, especially since many of these combinations are in small cities where the only local newspaper owns the only local TV or radio station.

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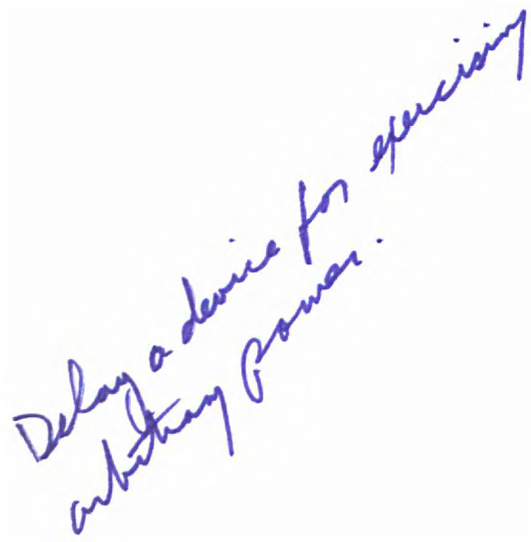
73 Associated Press ( ).

74 See Baer, Geller, et al. and OBM for background.


Delay a device for exercising
arbitrary power.

Not surprisingly, the FCC has been reluctant to do anything about it. Former FCC Chairman Dean Burch, even in an otherwise unnatural alliance with Commissioner Nicholas Johnson, was never able to muster a Commission majority in favor of proposed diverstiture rules. The political power of the A.N.P.A.[75] and the broadcasters is simply too great on an issue which does not seem to touch the public in a sensitive area. The Justice Department's antitrust division is hamstrung by the doctrine of primary jurisdiction. This legal precept requires a complainant to seek relief in a regulatory agency before approaching the courts. Accordingly, the antitrust division first petitioned the FCC for a divestiture rule-making and then, after five years of inactivity by the FCC, began challenging licenses of newspaper-owned stations. Congress immediately began hearings on legislation to prohibit Commission consideration of newspaper ownership in its license renewal process. Until the Commission acts one way or another in each case, which could take years, the division can not resort to the more congenial courts.

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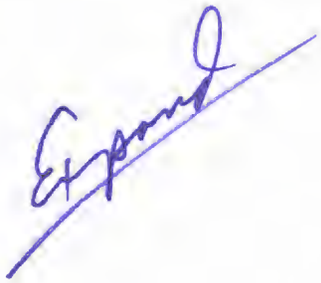
75 American Newspaper Publishers' Association. In 1975 the FCC finally resolved the issue by ordering a few divestitures in the most outrageous cases, and then dropping the proceeding.

The debilitating effects of newspaper-TV cross-ownership are obvious. The defense offered by cross-ownership apologists, aside from simple denial of the obvious, is that TV stations help to keep financially shaky newspapers afloat. It has never been clear why TV stations are uniquely suited to this public spirited objective. Why is it only TV stations and not, say, steel manufacturers who can do this? The argument is disingenuous. Newspapers own TV stations because to do so reduces competition, increases advertising prices, and increases profits.

The experience with cross-ownership suggests that measures might usefully be taken to strike the fetters from antitrust activity in broadcasting. This must be done with care, of course, since the antitrust division sometimes displays a monomaniacal preoccupation with competition for its own sake, rather than seeking that structure of industry which best serves the consumer interest. But a minimum reform would be legislation allowing the division immediate recourse to the courts in cases involving regulated industries, with the Commission itself as co-defendent in relevant cases. This would at least reduce the ability of the administrative agencies to use endless delay as a tactic in fighting reform.


Expand

Policies to Promote Freedom of Expression in Broadcasting

In reviewing the history of broadcasting, one is struck by two opposing phenomena. The first is the continuing effort of the FCC to promote policies which deter economic competition and freedom of expression. One could hardly improve on these policies if one started out to achieve such goals directly. But the other phenomenon is the persistent tendency of economic forces, often taking advantage of new technology, to undo the mischief created by the Commission. Cable is an important example of this. Over the long term the Commission and its clients, the industry, are continually put on the defensive by the efforts of the market to break free from unnatural constraints. Unfortunately the result is a continuous state of disequilibrium which encourages those unhealthy private interest relationships with government policymakers which make for scandal and corruption. One or another of the mass media is always in a position of needing some favor of the government, either to protect its interests or to become part of the protected group. Most of these issues are obscure to the public. The process is no different than that in other regulated industries (that is, most industries) but in this case there is an entirely obnoxious actual and potential interaction with

yes

but this sounds too extreme a remedy. →

Why does it sound so extreme? What is the social or political purpose to be served by power in media?

the First Amendment function of the media. Examples abound. The National Association of Broadcasters and other lobby groups contribute heavily to political campaigns. Newspaper and TV coverage of these campaigns is critical to political success. When the Washington Post and the TV networks opened up their guns on Watergate, there were attempts at reprisal through the regulatory process. That these were unsuccessful is probably due more to their lack of subtlety than to the checks in the system itself.

If television is an important medium of expression with enormous social influence, then it is far too important to leave under the control of politicians and bureaucrats in alliance with private monopoly interests. Freedom of expression and economic competition require decentralization, deregulation and disintegration; decentralization of decision-making in the private sector, deregulation at least of message content, and vertical disintegration of "naturally" monopolistic transmission media from the processes of creation and editing. Finally, consumers must be free to express their preferences with dollars.

APPENDIX TO CHAPTER 3

TELEVISION PROGRAMMING, MONOPOLISTIC COMPETITION AND WELFARE*

by

Michael Spence and Bruce Owen

Introduction

Advertiser supported television (and radio) has always posed a challenge to economic analysis. Various economists have examined distortions in program selection that result from advertiser support. These analyses have generally resembled models of spatial competition, and much of their flavor can be traced to Hotelling's famous paper on location. But none of the papers has employed a defensible measure of welfare.[1/] In most, the intensity of people's preferences are not fully taken into account.

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There are several phenomena that make broadcasting a peculiar market. First, consumers are given a free product (the program) in order to generate audiences which are then sold to advertisers. The program is free to the consumer not only because the transactions costs of collecting for programs are high, but also because the Federal Communications Commission (FCC) forbids per program charges for most programs. Second, TV programs have some of the attributes of public goods; the marginal cost of an additional viewer is almost literally zero. (Of course it may be necessary to spend more on program production to induce a larger audience to view the program.) Third, there is alleged to be an artificial scarcity of channels, due to FCC regulatory decisions.[2/]

These three conditions have been used to explain deficiencies in television performance, particularly with respect to the number and types of programs that are offered. Most economists would probably agree with the argument that FCC rules limiting the number of channels are inefficient. A few might also agree that rules barring pay TV (that is, TV that charges on a per program basis) might also be a cause of inefficiency. There is a policy debate on these matters. The issues are these. Should cable television systems be allowed to charge on a per program basis?[3/] Should control over channels on cable television be in the hands of one firm (the operator) or leased out to competitive programmers on a common carrier basis? It is the purpose of this paper to try to shed some light on these and other policy issues from the point of view of welfare economics by considering the forces that influence program selection under different supply conditions.

There are four pure cases of interest: advertiser support, or direct viewer payment (pay TV), with either limited or unlimited channels. (For our purposes, cable television is identical to over-the-air television, except that channel capacity on cable is not limited.) We wish to compare economic welfare in each of these four cases with each other and with the optimum. In addition, we shall examine the welfare implications of the choice between monopoly and competition, because some authors have argued that, at least under advertising support, monopoly may perform more efficiently than competition.[4/] Steiner

In most of what follows, we are comparing second best outcomes. This requires a measure of welfare. We use the total surplus: the gross dollar benefits of a collection of programs, minus the cost of supplying the programs. It is the multi-market sum of consumer and producers' surpluses. It is unambiguously defined only when income effects are negligible, and for the present analysis, income effects are assumed away.[5/]

The choice between pay TV and advertiser-supported TV is a choice between second best outcomes. Under any system, the marginal cost of supplying the program to an additional viewer is virtually zero. An efficient per program charge is therefore zero. Under advertiser support, the per program charge to the viewer is zero: pricing is efficient. However, the program is not supplied unless revenues cover the cost of producing the program, a cost that is independent of the number of viewers. The revenue under advertiser support comes from advertisers who pay a

price of roughly two cents per viewer per hour of prime time. The issue with respect to program selection then is whether two cents is a reasonable estimate of the average value of the program to the viewers of it. If it is not, then revenues may understate the social value of the program, and some programs with a potential positive surplus may not be profitable.

Under pay TV, producers of programs can appropriate a larger fraction of the surplus generated by a program by pricing it above marginal cost. Provided programs are not perfect substitutes for each other, pay TV will have the character of monopolistic competition. There will be an efficiency loss due to non-marginal cost pricing. However, by appropriating part of the surplus, the producers of some programs may be able to make positive profits when they could not with advertising support. Therefore, the attraction of pay TV is its potential for generating programs that cater to the tastes of groups of viewers whose size is sufficiently small that the program would be unprofitable under advertiser support. Pay TV has the ability partially to take into account the intensity of preferences. Thus the basic tradeoff is between inefficient pricing on the one hand, and the failure of advertiser supported TV to respond to intensities of preference on the other.

Even under pay TV (and in monopolistic competition more generally), there are potential problems with program selection. These result from the fact that revenues are only a fraction of the benefits generated by a program. Thus programs that yield a positive contribution to total surplus

may still be unprofitable becuase the revenues fail to cover fixed costs. But more importantly, the relationship between revenues and contributions to surplus will vary over programs, according to their demand characteristics. And therefore the market will be biased against certain kinds of programs in ways that are discussed below.

The analysis to follow deals with two related questions. The first is what biases in program selection arise under pay TV and under advertiser supported TV? Biases are to be interpreted as departures from the optimum. The biases are stated in terms of the demand and cost characteristics of programs. We argue that pay TV is biased against programs with low price elasticities of demand, and against high cost programs, and that advertiser supported TV is also, but more strongly. The second issue concerns the numbers of programs and the sizes of their audiences. Leaving aside biases and focusing on collections of similar programs, one can ask whether either regime supplies too many or too few programs.

The study of program selection under pay TV is formally indistinguishable from the analysis of product selection under monopolistic competition.[6/] Some of the following models could be stated in more general ways at great cost in terms of notational complexity. We feel they illustrate the important forces better than would a more abstract analysis.

Policy choices in this market are dependent on the structure of demand, and that is an empirical question. Our aim here is not to dispose of the policy issues (and we certainly have not). It is rather,

in the context of an explicit welfare criterion, to focus attention upon important parameters that determine the welfare implications of regulatory policies. These parameters are objects about which one can have intuitions as well as evidence, and upon which the policy debate can be based.

2. Sources of Bias in Program Selection

The Model

We begin by supposing that there are n possible different types of programs. The list can be rather long and is intended to be exhaustive. The number of viewers of the i-th program (the audience size) is x_i, $i = 1,\ldots,n$. The vector x is $(x_1,\ldots,x_n)$. Given a set of program offerings, each viewer will select his preferred program. Each viewer has a reservation price for the program he selects, a number that gives the dollar value of that program to him. We add up these dollar benefits for all viewers to arrive at a measure of the gross dollar benefits for all viewers. These are denoted $B(x)$, the benefit function.

To illustrate biases in program selection, we shall use a benefit function with the following form:

$$(1) \qquad B(x) = \sum_i \phi_i(x_i) - \sum_{i,j} A_{ij} x_i x_j \quad .$$

Each $\phi_i(x_i)$ is concave. (That is equivalent to assuming demand curves are downward sloping. See below.) Without loss of generality, $A_{ii} = 0$ for all i. The coefficients A_{ij} are non-negative so that $B_{ij} = -2A_{ij} < 0$ and all programs are substitutes.

This functional form gives us considerable flexibility in specifying the demand interactions among products. A pair of products i and j can be demand independent ($A_{ij} = 0$) or very close substitutes (A_{ij} large). We can characterize groups of close substitutes or what have been referred to as lowest common denominator programs within this framework. In addition, the functions $\phi_i(x_i)$ determine the shapes of the individual demand functions (see below) and these can be selected in any desired fashion. The form (1) is not perfectly flexible. But it can be generalized without affecting the qualitative conclusions set out below.[7/]

We assume that viewers choose programs in a one-period context (i.e., one hour), so that each viewer consumes only one program. No two programs are perfect substitutes though they can be very close substitutes.

When confronted with prices, $p_1,\ldots,p_n$, for the n programs, viewers will react by allocating themselves to programs so as to maximize the net benefits to them:

$$(2) \qquad B(x) - \sum_i p_i x_i \quad .$$

Therefore, maximizing (2) with respect to x, we have

$$(3) \qquad \frac{\partial B_i}{\partial x_i} = B_i = p_i \quad , \qquad \text{for} \quad i = 1,\ldots,n \quad .$$

The conditions (3) can be interpreted in another way. Since they hold for any set of prices $p_1,\ldots,p_n$, they define the inverse demand functions

for the programs. The inverse demand functions are the partial derivatives of the benefit function.

Let us turn briefly to advertising and to program costs. Let z be the price per viewer paid by advertisers, and let F_i be the cost of producing a program of type i. For prime time network television, $F_i \approx 250{,}000$ dollars per hour and $z \approx 2$ cents per household for the six minutes of commercials permitted. In practice, z is a declining function of x_i, and there is some relationship between i and z. For example, viewers care about the amount of advertising. We could handle that by making the same programs with different numbers of minutes of advertising, different programs (because demands would be different). But then z_i would depend on the program. In what follows, we ignore these complications, though no important conclusion is affected by the simplification.

Since we are not interested in the advertising market per se, but only in its impact on programming, we shall assume that advertisers pay exactly what advertising is worth to them.[8/] Thus the surplus in the advertising market is equal to the revenues it provides the suppliers of programs.

The surplus generated by both markets is the sum of benefits to consumers, $B(x)$, and the advertising revenues, $z\sum_i x_i$, minus costs of programs, $\sum_i F_i$. Letting $T(x)$ be the total surplus, we have

$$T(x) = B(x) + \sum_i (zx_i - F_i) \quad . \tag{4}$$

Program Selection Under Pay TV

We begin by considering program selection under pay TV with unlimited channels. The price per viewer for the i-th program is $p_i(x) = B_i(x)$. Therefore the profits of the supplier of the i-th program are

$$\pi_i = p_i x_i + z x_i - F_i \tag{5}$$
$$= B_i x_i + z x_i - F_i \quad .$$

Note that advertising is permitted as well as per program fees.

The market is monopolistically competitive. Each firm maximizes profits by setting x_i, and entry occurs until all profitable programs are being supplied.[9/]

We want to characterize the market equilibrium in a way that facilitates comparison with the optimum. We do this by showing that the process of competitive interaction (including entry and exit) results in the implicit maximization of some function which is neither the total surplus, nor industry profits.

When $B(x)$ has the form (1), then the total surplus is

$$T(x) = \sum_i (\phi_i + z x_i - F_i) - \sum_{i,j} A_{ij} x_i x_j \quad . \tag{6}$$

The profits of the i-th firm are

$$\pi_i = x_i \phi_i' + z x_i - F_i - 2 \sum_j A_{ij} x_i x_j \quad . \tag{7}$$

Industry profits are

$$(8) \qquad \pi = \sum_i \pi_i = \sum_i (x_i \phi_i' + z x_i - F_i) - 2 \sum_{i,j} A_{ij} x_i x_j \quad .$$

We shall show that the monopolistically competitive market implicitly maximizes the function

$$(9) \qquad R(x) = \sum_i (x_i \phi_i' + z x_i - F_i) - \sum_{i,j} A_{ij} x_i x_j \quad .$$

The argument is straightforward; we give it and then comment. The argument is that

$$(10) \qquad R(x) - R(x_1, \ldots, x_{i-1}, 0, x_{i+1}, \ldots, x_n) = (x_i \phi_i' + z x_i - F_i) - 2 \sum_j A_{ij} x_i x_j \qquad \text{(from (9))}$$

$$= \pi_i \quad . \qquad \text{(from (7))}$$

Thus $\pi_i(x) = R(x)$ - something that does not depend on x_i. Thus in maximizing π_i with respect to x_i, the i-th program producer is maximizing $R(x)$ with respect to x_i. Thus all producers together act so as to maximize $R(x)$.

By comparing $R(x)$, $T(x)$ and $\pi(x)$, we can determine the ways in which competitive pay TV and monopoly under pay TV will deviate from the optimum both in terms of pricing and program selection. We turn therefore to these differences.

The difference between $T(x)$ and $R(x)$ is that the $\phi_i(x_i)$ in $T(x)$ are replaced by $x_i\phi_i'$ in $R(x)$. These small differences have large consequences. Since ϕ_i is concave (it must be for demand, $\partial p_i/\partial x_i = \phi_i'' < 0$, to be downward sloping), $\phi_i > x_i\phi_i'$. Thus revenues are less than the program's contribution to surplus. For reference, the contribution of program i to the surplus is

$$\Delta T_i = \phi_i + zx_i - F_i - 2\sum_j A_{ij}x_jx_i \quad . \tag{11}$$

This means that ΔT_i can be positive when $\pi_i < 0$ in which case the program will be lost. To simplify notation, let the linear coefficient of x_i in T and R be

$$c_i = 2\sum_j A_{ij}x_j - z \quad . \tag{12}$$

The pattern of pricing is also affected by the difference between ϕ_i and $x_i\phi_i'$. From (11) and (7) we have

$$\frac{\partial \Delta T_i}{\partial x_i} = \phi_i' - c_i \quad , \tag{13}$$

while

$$\frac{\partial R}{\partial x_i} = \frac{\partial \pi_i}{\partial x_i} = \phi_i' + x_i\phi_i'' - c_i \quad . \tag{14}$$

Therefore when $\partial\pi_i/\partial x_i = 0$, $\partial\Delta T_i/\partial x_i > \partial\pi_i/\partial x_i = 0$. This is the familiar tendency of monopolistic competition to price above marginal cost.

We can use this apparatus to analyze the biases in program selection which characterize monopolistic competition and pay TV. To facilitate the exposition, we consider the case in which $\phi_i(x_i) = a_i x_i^{\beta_i}$, where a_i and β_i are parameters and $0 < \beta_i < 1$, so that ϕ_i is concave. Let

$$\Delta T_i^* = \max_{x_i} \Delta T_i \quad , \tag{15}$$

and let

$$\pi_i^* = \max_{x_i} \pi_i \quad . \tag{16}$$

A somewhat tedious calculation yields the conclusion that[10/]

$$(\pi_i^* + F_i) = \beta_i^{\frac{1}{1-\beta_i}} (\Delta T_i^* + F_i) \quad . \tag{17}$$

In words, (17) says the maximized revenues for a program are a fraction $(\beta_i^{1/(1-\beta_i)})$ of the maximized gross benefits of that program. Equation (17) is the crucial relationship for examining biases in product selection.

It is easily verified that the function

$$n(\beta) = \beta^{\frac{1}{1-\beta}} \quad , \tag{18}$$

increases monotonically from 0 to 1/e on the interval [0,1].[11/] Therefore, the smaller β_i is, the smaller will be the ratio of revenues

to incremental benefits. It is now not difficult to see that the bias is against products with small β_i's. Specifically, assume two products i and j have the same program costs, $F_i = F_j = F$, and suppose they contribute equally to the surplus, $\Delta T_i^* = \Delta T_j^*$. Then from (17)

$$\frac{\pi_i^* + F}{\pi_j^* + F} = \frac{n(\beta_i)}{n(\beta_j)} \quad . \tag{19}$$

Thus, if $\beta_i < \beta_j$, $\pi_i^* < \pi_j^*$. If $\pi_j^* = 0$ so that programming is just profitable, program i, which contributes equally to the surplus, will be unprofitable and will not be produced, though its contribution to the surplus is positive. In the present parameterization of the problem, the bias is against products with small β_i's. What is β_i? Since

$$p_i = a_i \beta_i x_i^{\beta_i - 1} - c_i \quad , \tag{20}$$

it is fairly clear that β_i determines the steepness of the inverse demand function. This is akin to but not the same as the own-price elasticity of demand. Therefore the bias is against programs with steep inverse demand functions. These are precisely programs with small groups of high value viewers after which reservation prices fall off rapidly.

Stepping back from the present parameterization, the general bias is against programs that have demands such that revenues capture a small fraction of the gross benefits. This comes as no surprise. When the entry condition is profitability, revenues are the signal of benefits.

They will be a more or less misleading signal depending upon the fraction of the benefits they actually capture. Programs for which revenues are a small fraction of the surplus are special interest programs.

It is important to note that not all programs with small β_i's are eliminated. Some may simply have huge audiences (i.e., a_i is large). That is why the bias is stated in terms of constant or equal contributions to the surplus.

There is another bias; one against costly programs. It is also derivable from equation (17). Suppose that for two programs, i and j, $\Delta T_i^* = \Delta T_j^*$, and $\beta_i = \beta_j = \beta$. It follows from (17) that

$$(\pi_i^* = \pi_j^*) = (1 - \beta^{\frac{1}{1-\beta}})(F_j - F_i) \quad . \tag{21}$$

Therefore, if $F_j > F_i$ then $\pi_j^* < \pi_i^*$. If $\pi_i^* = 0$ then program j will be unprofitable and will not be produced even though its contribution to surplus is the same as that at program i. Thus there is a bias against costly programs, other things equal. There seems no obvious relation between program costs and the usual program categories. Some minority taste programs are expensive, others are not, and the same is true of mass appeal programming, leaving aside the effects of competition for scarce factors.

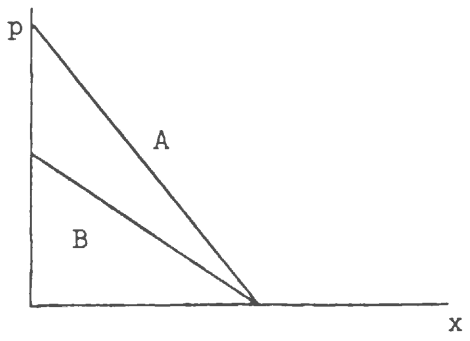
A word about monopoly is perhaps in order. $\pi(x)$ differs from $T(x)$ in two respects: the $\phi_i(x_i)$ are replaced by $x_i\phi_i'$ and the cross effects term is multiplied by two. Two conclusions follow. First,

monopoly will exhibit biases similar to those just described for competition. And second, it will tend to hold prices up more and supply fewer programs than either the optimum or competition. The latter follows from the factor of two multiplying the cross effects term.[12/] Thus monopoly tends to produce less "diversity" and to result in higher prices than monopolistic competition.

Program Selection Under a Competitive, Advertiser Supported System

We examined certain biases in product selection associated with pay TV. We want now to compare these problems with those that arise with an advertiser supported system like the present one. When advertising revenues are the sole source of support, all that matters is what the demand for a program is at a zero price. The products whose demands are depicted in Figure 1 will generate equal revenues with advertiser support, even though both the surplus and profits under pay TV will be larger for product A. Therefore one might expect that advertiser supported TV is even harsher on low elasticity products than pay TV. And with suitable ceteris paribus assumptions, this can be shown to be true.

Figure 1



The point is most easily illustrated with linear demand functions, though the principle applies generally. Assume therefore that $\phi_i(x_i) = a_i x_i - A_{ii} x_i^2$. With this assumption, the demand for the i-th product is

$$(22) \qquad p_i = {}_i = (a_i - c_i) - 2A_{ii}x_i \quad ,$$

where c_i is as defined in (12). Under advertiser support, prices to viewers are zero so that audience size is

$$(23) \qquad x_i = \frac{a_i - c_i}{2A_{ii}} \quad .$$

The profits of the i-th program produced under advertiser support are

$$(24) \qquad \hat{\pi}_i = z\left(\frac{a_i - c_i}{2A_{ii}}\right) - F_i \quad .$$

Under pay TV, the profits of program i maximized with respect to x_i are[13/]

$$(25) \qquad \pi_i^* = \frac{(a_i - c_i)^2}{8A_{ii}} - F_i \quad .$$

The maximized contribution to the total surplus is

$$(26) \qquad \Delta T_i^* = \frac{(a_i - c_i)^2}{4A_{ii}} - F_i \quad .$$

Notice that $(\pi_i^* + F_i)/(\Delta T_i^* + F_i) = 1/2$. With linear demand curves, there are no biases of the elasticity type, under pay TV. However, from (24) and (25), we have

$$(27) \qquad (\pi_i^* + F_i) = \frac{1}{2} A_{ii} \left(\frac{\hat{\pi}_i + F_i}{z}\right)^2 .$$

It is now easy to establish the biases from advertiser-support. Suppose that for two products, i and j, $F_i = F_j = F$ and $\pi_i^* = \pi_j^*$. From (27) it follows that

$$(28) \qquad \frac{\hat{\pi}_i + F}{\hat{\pi}_j + F} = \sqrt{\frac{A_{jj}}{A_{ii}}} .$$

Therefore, if $A_{ii} > A_{jj}$, then $\hat{\pi}_j < \hat{\pi}_i$. If two programs have the same costs and are equally profitable under pay TV, the program with the steeper demand curve is less profitable under advertiser support. Moreover, the same statement holds for products that contribute equally to the total surplus in the linear case, since with the same costs, the ratio of profits to surplus is always 1/2.

In general, advertiser support, by giving all viewers equal weight serves special interests poorly, and less well than pay TV. Under pay TV, those with strong preferences can, to some extent, vote with dollars.[14/] Advertisers, on the other hand, only count heads.

The program types (or, more generally, commodities) against which monopolistic competition is biased can often be provided by organizations

outside the formal market system. There are clubs, societies, and other not-for-profit institutions formed for the purpose, among others, of publishing a newsletter or magazine or academic journal. We have, then, an explanation of the existence of such organizations in the failure of the market system to provide certain goods. However, there is a difficulty. The bias against such goods is greatest in precisely that case where individual valuations of the good vary widely, and thus where clubs may also have considerable difficulty in setting fees. If a uniform price would capture enough of the surplus to cover costs and normal profits, a club would not be needed. Perhaps this explains the proliferation of rates and membership categories which are often found in clubs. It may be easier for potential members to identify each other than for outsiders to do this. Of course, FCC policies prevent this sort of response in television at present, although public broadcasting has some of the attributes of a club.

From the point of view of biases in product selection, pay TV is not ideal, because prices exceed marginal costs, but it appears to be preferable to advertiser support. The choice may be between not having a program at all, and having it available at an inefficient price. Half a loaf may be better than none.

3. Numbers of Programs and Audience Sizes in Equilibrium

Our concern up to this point has been to show there are biases against programs with certain comparative demand characteristics under

both pay TV and advertiser supported television. Roughly speaking, the biases are against special interest and expensive programs, both being more pronounced under advertiser support.

Apart from these biases, there is the question of which system provides the better second best solution. In this section, we consider this and related questions. Having discussed biases, it is convenient to set that issue aside and to conduct the present analysis by considering similar (but not necessarily highly substitutable) products. In part, this is a device for making the analysis of equilibrium tractible. Specifically, let us assume in the previous model that $\phi_i = \phi$, $F_i = F$ and $A_{ij} = A$ for all i and j. Since the demand parameters and costs of programs are similar in all respects, the audience sizes will be the same in equilibrium: $x_i = x$ for all i. The equilibrium and the optimum can therefore be characterized by n, the number of programs and by x, the audience size. (Note that programs are <u>not</u> assumed to be perfect substitutes for each other.)

With these assumptions, the total surplus in equation (4) becomes

$$T(x,n) = n\phi(x) - Ax^2(n^2 - n) - nF + nzx \quad . \tag{29}$$

The function implicitly maximized by monopolistic competition is

$$R(x,n) = nx\phi' = Ax^2(n^2 - n) - nF + nzx \quad . \tag{30}$$

Industry profits, the objective function of the monopolist, are

$$\pi(x,n) = nx\phi' - 2Ax^2(n^2 - n) - nF + nzx \quad . \tag{31}$$

At this point it is most useful to illustrate the optimum and various equilibria diagrammatically. This is done in Figure 2, for a typical case.[15] In general, the pay TV equilibrium (E) is below and to the left of the optimum (O). Monopoly under pay TV (M) is below and to the left of E. There can be exceptions but they are not of great interest. The points S and T are second best optima of a slightly different kind. T, for example, is the point of tangency of an iso-surplus line with the zero profit line ($R_n = 0$). Thus if entry cannot be controlled but prices can (via taxes or direct regulation), T is the highest attainable point. Similarly, S is the second best with monopolistically competitive pricing taken as given. It is achieved by subsidies to producers of programs. It is possible that E could correspond to either S or T, but not to both.[16]

Under a competitive, advertiser supported system, pricing is optimal so that $T_x = 0$. Entry occurs until profits per program, $zx - F$ are zero. Thus $x = F/z$, as shown (point CA). With monopoly and advertiser support, pricing is the same but the introduction of new programs stops before profits are zero, at a point like MA.

The point X is of some interest. At X, pricing is optimal and the total surplus is the same as at E. Thus X gives the number of programs that are required under advertiser support to equal the performance of pay TV.

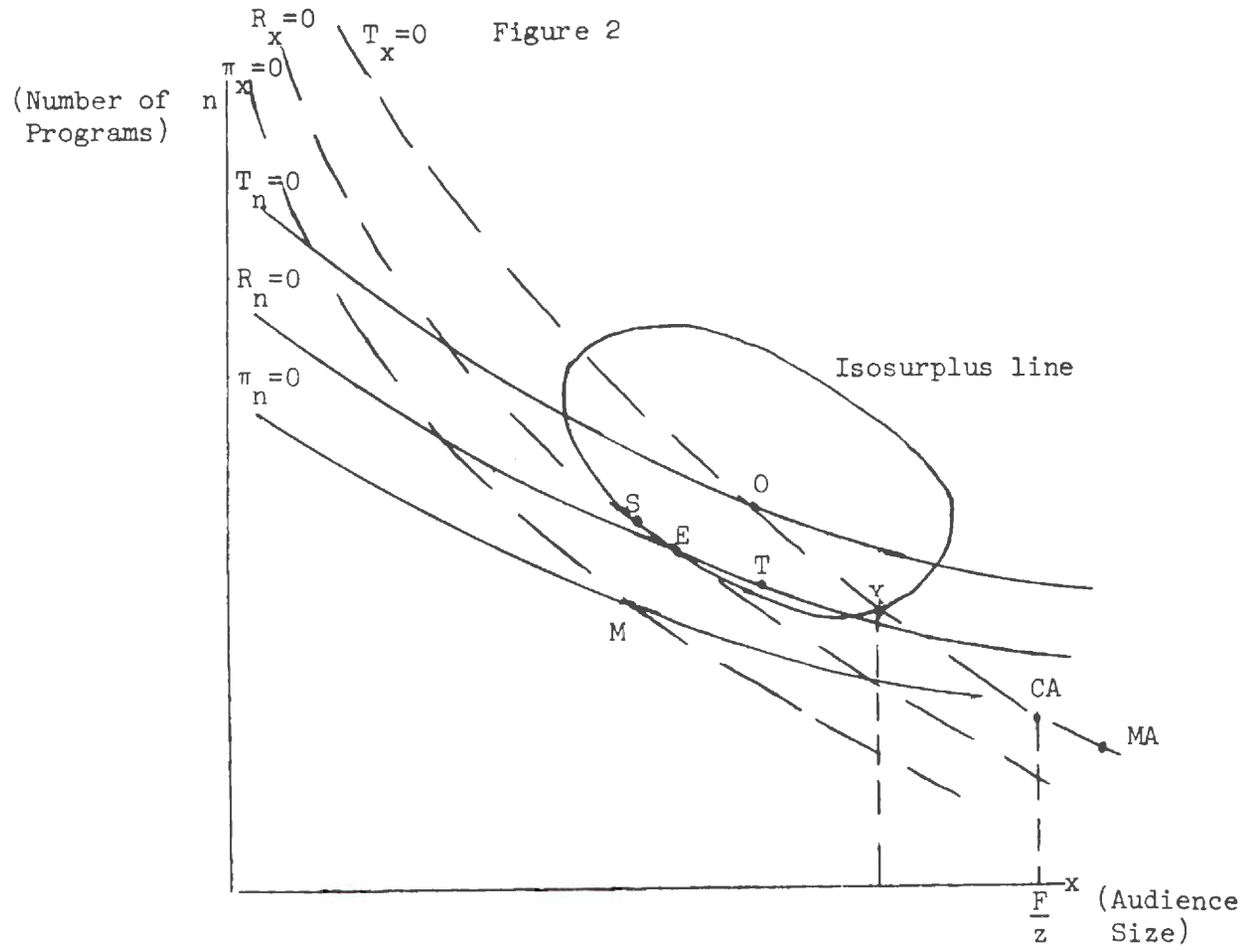


Figure 2

Summary of Points:

O	optimum
E	competitive pay TV equilibrium
M	monopoly pay TV
S	second best optimum given $\pi \geq 0$ constraint
T	second best optimum given monopolistically competitive pricing
CA	competitive advertiser support equilibrium (with unlimited channels)
MA	monopoly advertiser support
X	If advertiser TV were subsidized to permit more programs, the point at which the total surplus is the same as at E.

The Relative Positions of the Equilibria

The relative positions of the various equilibria in Figure 2 obviously depend upon some assumptions about the magnitudes of the parameters in the model. And since these positions determine the attractiveness of the equilibria from a welfare point of view, it is important to discuss how the equilibria move about when the parameters change.

The relationship between E and O is determined largely by the own price elasticity of demand for the representative product. This is most easily seen by observing that the demand for a representative program is

$$p = \phi' - 2A\bar{x}(n - 1) \quad , \tag{32}$$

so that

$$\frac{dp}{dx} = \phi''(x) \quad . \tag{33}$$

Thus if ϕ'' is small, the inverse demand curve is flat. But ϕ is also more nearly linear so that ϕ and $x\phi'$ do not differ greatly. The surplus, T, and the function implicitly maximized under monopolistic competition, R, differ in that ϕ is replaced by $x\phi'$. When this difference is small, the optima, E and O, are close together. Conversely, it is when price elasticities are low that E and O are far apart.

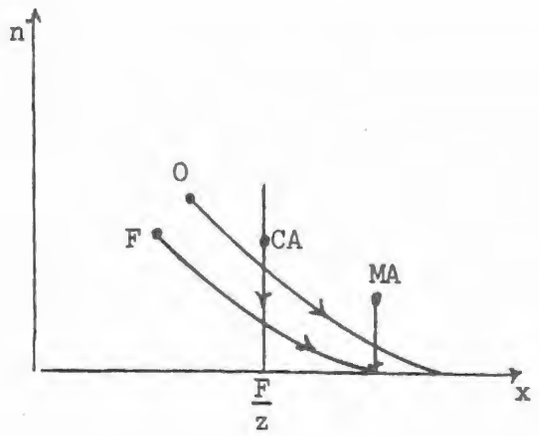
In contrast, the relative positions of CA, the advertiser supported equilibrium, and O, the optimum, are determined by the cross elasticities

of demand, and by the size of z relative to the average valuation of a program by viewers. Cross elasticities or degrees of substitutability are determined by the parameter A. As A increases (programs become closer substitutes), the optimum can be shown to move downward and to the right as depicted in Figure 3.[17] Similarly the equilibrium under pay TV, E, also moves down and to the right. The number of programs declines and the audience size increases. On the other hand, the advertiser supported equilibrium simply moves down. The number of programs is reduced but audience size remains the same. Two conclusions follow immediately. If cross elasticities are high, then competitive advertiser support may be preferable to pay TV. And if cross elasticities are even higher so that the optimum is to the right of the competitive advertiser supported equilibrium, CA, then monopoly under pay TV (MA) may be preferred to competitive advertiser support and pay TV. With very close substitutes, the tendency of monopoly to restrict programs becomes an advantage. This conclusion for the case of perfect substitutes appears in the literature, where it is argued that monopoly avoids duplication of perfect substitutes.[18]

Monopoly has another potential advantage. If the number of channels is limited, competitive advertiser support may use up scarce channels with close substitutes. Monopoly may limit the number of close substitutes, and use the remaining channels for programs that are less perfect substitutes. Such programs may be less profitable individually but do not cut into the audiences generated by the other programs as much.

Figure 3

Effect of Increasing Program Substitutability



The importance of cross elasticities in determining the relative positions of the optimum (O) and the equilibrium (CA) is sufficient to justify a brief analytic treatment. The gross dollar benefits from n programs of audience size x are

$$B = n\phi(x) - Ax^2(n^2 - n) \quad . \tag{34}$$

The rate of increase of these benefits with the number of programs is

$$\frac{\partial B}{\partial n} = \phi - Ax^2(2n - 1) \quad . \tag{35}$$

Thus the rate of increase of benefits per viewer is

$$\frac{1}{x}\frac{\partial B}{\partial n} = \frac{\phi(x)}{x} - Ax(2n - 1) \quad . \tag{36}$$

The rate of increase of costs (nF) per viewer, is clearly

$(1/x)(\partial(nF)/\partial n) = F/x$. Now let us examine those quantities at the competitive advertiser supported equilibrium.

At that equilibrium, the audience size is F/z. In addition, prices are zero so that

$$\phi'(y) = 2Ay(n - 1) \tag{37}$$

where $y = F/z$. This expression defines the equilibrium number of programs, n. Using (37), and substituting in (36), we find that the rate of increase of average benefits per viewer with the number of programs is

$$g = \frac{1}{y}\frac{\partial B}{\partial n} = [\frac{\phi(y)}{y} - \phi'(y)] - Ay \quad . \tag{38}$$

The rate of increase of costs is $F/y = z$.

One can now see precisely what determines the relationship between the optimum and the equilibrium. If g, the average benefits per viewer of the marginal program, exceeds z, the average cost, the number of programs should be increased from the equilibrium and conversely. From (38), one observes that increasing the cross effect, A, makes average benefits smaller. If A is large enough, g may be less than z, that is, the optimum has fewer programs than the equilibrium. The other factor that determines average benefits at the equilibrium is the term in square brackets in (38). It is positive because ϕ is concave. Moreover, speaking somewhat imprecisely, the more concave ϕ is, the steeper the inverse demand and the larger the average benefits <u>of an additional</u> program.[19/]

To assess the performance of the present system, one wants to compare g and z, or equivalently gy and $zy = F$. This can be done for networks rather than programs with the available data. Table 1 presents some rough and ready empirical data on the issue at hand. Using demand estimates for cable TV, Noll, Peck and McGowan [1973] estimated consumer surplus from (free) network-TV channels. (These are presented in the table in 1970 dollars.) 1970 costs for the operation of the three networks and their affiliated stations averaged $800 million per channel. Various authors, including Park [1973], have estimated that the profitability of a fourth advertiser supported network is approximately nil. The figures in the profit column are simply the authors' guess as to normal network profits averaged over the business cycle.

Table 1

Benefits, Costs, and Profits from TV Channels
(millions of dollars per year)

Number of channels	Consumer surplus	Marginal consumer surplus	Marginal cost	Marginal profit (advertising)
1	16000	16000	800	100
2	25100	9100	800	75
3	31300	6200	800	25
4	36000	4700	800	$\simeq 0$
5	39800	3800	800	< 0

Source: Consumer surplus based on estimates in Noll, Peck and McGowan [1973] (p. 288); other data based on rough estimates by the authors: see text.

The point of all this is that while the addition of more networks clearly adds to surplus up to some point far beyond the present number (three), these new networks would not be profitable under advertising support. While the estimates are rough, the orders of magnitude are almost certainly correct. Thus, advertising prices fail by a wide margin to reflect viewers' valuations of programs. This suggests that the competitive, advertiser supported equilibrium (CA in Figure 2) is not in fact very close to the optimum in absolute terms, and increases the likelihood that E is superior to CA.

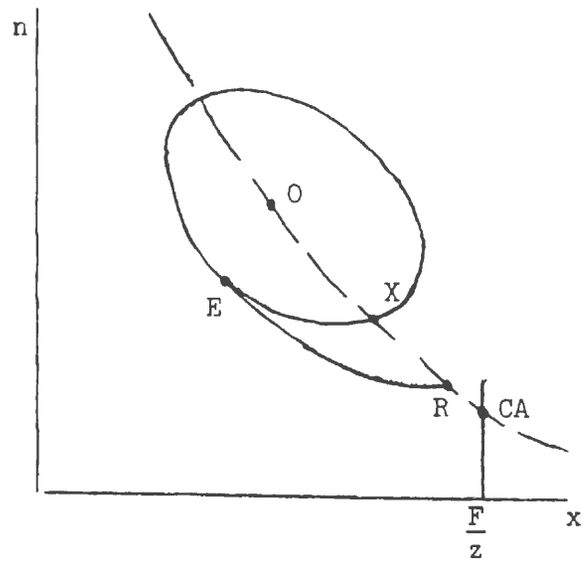
Consumer Surplus

It might be argued that the total surplus is not what one ought to focus on, but rather consumer surplus (the benefits to the public). It is true that some of the benefits of pay TV accrue to the producers of programs. But that does not imply that consumers are hurt, on average. It is of course almost inevitable that a change from advertiser support to cable will redistribute benefits. The consumer surplus in the symmetric case is simply

$$S = T(x,n) - \pi(x,n) \tag{39}$$
$$= n(\phi - x\phi') + Ax^2(n^2 - n) \quad .$$

Iso-consumer surplus lines are tangent both to iso-total surplus lines and to isoprofit lines. The iso-consumer surplus line through E is depicted in Figure 4. It intersects the marginal cost pricing line at R. It is below and to the right of X, where the total surplus is the

Figure 4



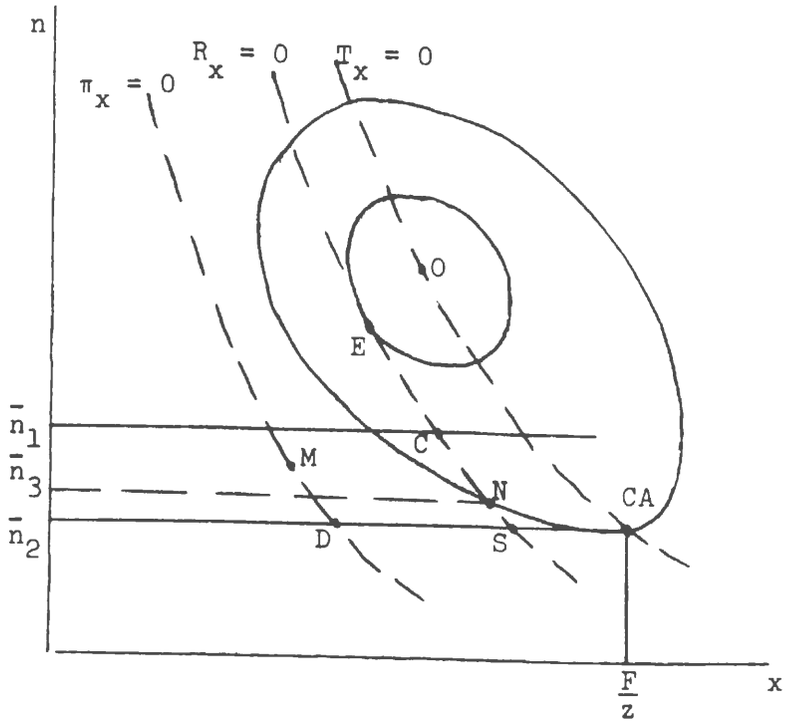
same as at E. It is possible for CA to lie between X and R. In that case pay TV would increase the total surplus but hurt consumers (qua consumers--someone gets the revenues or profits). The position of CA relative to R is an empirical question. For the reasons cited above, we think CA is likely to be considerably to the right of X and R.

Limited Channels

The FCC is alleged to artificially limit available channels, at least on the VHF band in the larger cities, with the result that broadcasters earn scarcity rents and program variety is reduced.

The effect of limiting the number of available channels can be examined with the aid of Figure 5. If the number of channels is restricted to $\bar{n}_1$, competitive pay TV will generate the outcome C. It is

Figure 5



worse than the equilibrium E. The constraint $n \leq \bar{n}_1$ has no effect on a monopolist. If n is constrained to be equal or less than $\bar{n}_2$, the monopolist under pay TV will be at D, and competition under pay TV is at S. And since $\bar{n}_2$ is the number of channels in an advertiser supported equilibrium, S is inferior to CA. In order that pay TV produce a preferred outcome, the channel constraint must be lifted to $\bar{n}_3$. The outcome then becomes N (N and CA are on the same iso-total surplus line).

The two conclusions that follow from these facts are first, that if channel capacity is naturally limited, pay TV may not be desirable, and second, that pay TV has few virtues if entry into the programming industry is effectively restricted by holding the number of channels down. Under

pay TV restrictions on entry serve no purpose beneficial to consumers.[20] In fact, the number of channels is not "naturally" limited, especially in cable. But these results suggest that it may be a mistake for the FCC to allow pay TV in the existing artificially limited over-the-air channels unless steps are taken to allow expansion of channel capacity.

First Best Outcomes and Informational Requirements

If one supposes, for the sake of argument, that suppliers of programs were perfect price discriminators, then it is not difficult to see that the program selection problem would disappear. For if each supplier of a program could perfectly price discriminate, he could appropriate exactly the marginal contribution of his product to the total benefits. Thus with price discrimination, the producer of the i-th program has profits of

$$\begin{aligned}(40)\qquad \bar{\pi}_i &= \Delta T_i(x) - F_i \\ &= B(x) - B(x_1,\ldots,x_{i-1},0,x_{i+1},\ldots,x_n) - F_i \\ &= [B(x) - \textstyle\sum_j F_j] - [B(x_1,\ldots,0,\ldots,x_n) - \sum_{j\neq i} F_j] \\ &= \Delta T_i \\ &= T(x) - T(x_1,\ldots,x_{i-1},0,x_{i+1},\ldots,x_n) \quad .\end{aligned}$$

When the i-th producer maximizes profits, he is maximizing the total surplus, $T(x)$ with respect to x_i. The equilibrium is optimal, and price discrimination would eliminate the problem.[21]

The optimal policy would be to forbid any marginal fees (such as per program charges) and to supplement the resulting programs with direct subsidies to programs which, while contributing to surplus, did not appear in the private market. This is in fact almost exactly the present policy in a superficial sense: per program charges are in practice forbidden and there are direct subsidies to public broadcasting stations. In fact, however, no attempt is made to subsidize those programs which would make the greatest contribution to surplus. One reason this is not done is that the costs of acquiring the information requisite to the task are enormous. (The government would require the same information needed by the price-discriminator--in effect, the reservation price of each individual for each program, and all the substitution effects.) Even if the information were somehow available, there would be serious First Amendment questions involved in the subsidization policy, since presumably some programs would be controversial. It is for these reasons that we enquire into the probable effects of second-best institutional alternatives, despite the superficial suitablity of present policies.

4. Summary of Results

This paper has focused on the welfare implications of alternative market structures and policies in the broadcasting industry. Welfare is measured by the sum of producers' and consumers' surplus. It has been demonstrated that any of the private market systems considered contain biases against certain kinds of programs. These biases result in the

absence from the market of programs which "ought" to be produced, in the sense that their marginal benefits exceed their marginal costs. The programs which are likely to be omitted are those with low own-price elasticity of demand ("minority taste programs") and those which are expensive to produce. The cause of this bias is the failure of prices, as marginal signals, to reflect fully the average intensity of preferences for certain programs. In the presence of fixed costs, this leads to the nonviability of such programs, since benefits but not revenues exceed costs. The bias is present with pay TV, but it is worse under a competitive, advertiser supported structure such as we now have. This is so because pay TV prices reflect intensity of preferences better than the flat capitation rate paid by advertisers. In the pay TV case, monopoly does worse than competition, unless there is perfect price discrimination. An advertiser supported monopolist produces fewer programs, and has the same biases, as a competitive advertiser supported system.

Leaving aside the question of bias among program types, we can examine the positions of the various market structure equilibria with respect to each other and the optimum in terms of the number of programs produced and their audience sizes. This is done by taking the symmetric case in which all programs have identical demand and cost parameters. The relative positions of the equilibria depend on empirical issues, and in particular on the degree to which programs are close substitutes for each other. As the cross elasticity of substitution among programs increases, advertising support becomes more (and pay TV less) likely to

approximate a feasible second-best structure for the medium. Some sketchy empirical evidence suggests that the advertiser supported equilibrium is in fact not very close to the optimum. Another possible reason for preferring advertiser support is in the case where channels are either naturally or artificially limited. Here, pay TV may well make things worse. Thus, the argument for pay TV does depend on channels being unlimited, or equivalently, on a policy of open entry.

Finally, a first-best solution requires a set of subsidies and rules which are remarkably similar on the surface to those which presently exist. Unfortunately, the information required to operate successfully in this mode is not available. Determination of the second-best policy requires empirical analysis. Casual empiricism suggests that a system of open entry and pay TV is probably the second-best market structure.

Addendum: ~~Appendix:~~ Analysis of the Symmetric Case

The total surplus can be written as follows

$$T(x,n) = n\phi(x) - Ax^2(n^2 - n) - nF \tag{43}$$

from (4) with $\phi_i \equiv \phi$, $F_i = F$ and $A_{ij} = A$ for all i and j. The two optimizing conditions are $T_x = 0$ or,

$$\phi' = 2Ax(n - 1) \quad , \tag{44}$$

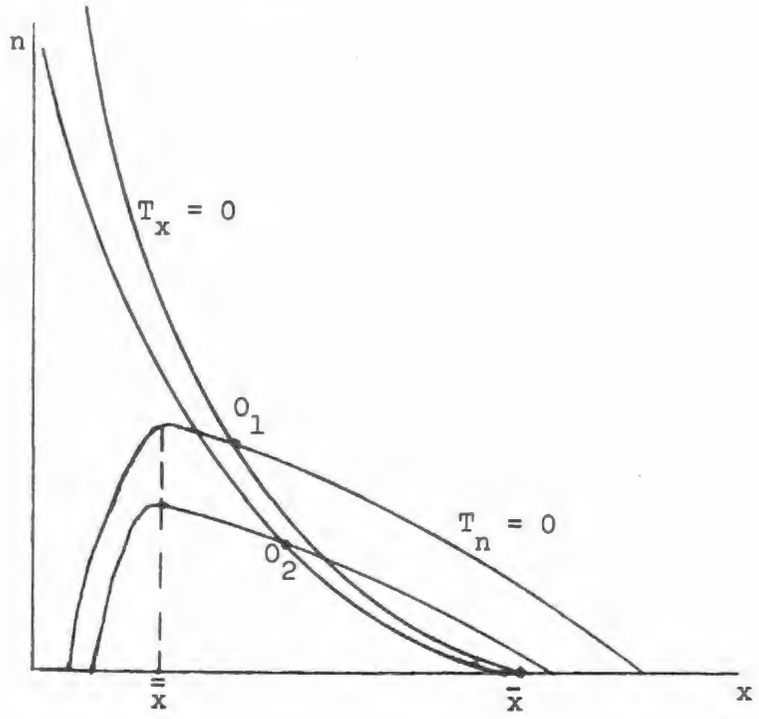
and $T_n = 0$ or,

$$n = \frac{1}{2} + \frac{\phi - F}{2Ax^2} \quad . \tag{45}$$

Figure 6 shows a picture of these two conditions. Note that when $n = 1$, $\phi'(x) = 0$. Let that occur at $x = \bar{x}$. Note also that the pick of the curve $T_n = 0$ occurs when $(\phi - F)/x^2$ is at a maximum. Let that quantity be $\bar{\bar{x}}$. The optimum is at O_1. Now suppose we raise A. Both curves drop downward (see (44) and (45)). However, the line $T_x = 0$ pivots around $(\bar{x},1)$, because, for every A, $\phi'(x) = 0$ when $n = 1$. Therefore, as A rises, the optimum must eventually approach the point $(\bar{x},1)$, because, eventually the line $T_n = 0$ will hit the x-axis to the left of $\bar{x}$. This means that as the cross elasticities become high, the optimal number of programs falls and the optimal audience size rises toward $\bar{x}$.

To analyze the equilibrium with pay TV, we simply replace ϕ by $\mu(x) = x\phi' < \phi$ in the preceding equations. The equivalent of $\bar{x}$ occurs

Figure 6



when $\phi' + x\phi'' = 0$. Let that point by $\hat{x}$. Clearly $\hat{x} < \bar{x}$. Similarly the analogue of $\bar{\bar{x}}$ occurs at the maximum of $x\phi'/x^2$. Call that point $\hat{\hat{x}}$. Again $\hat{\hat{x}} < \bar{\bar{x}}$.

The fact that $\hat{x} < \bar{x}$ is of special importance. It says that as cross elasticities become large, and the programs become more perfect substitutes, the equilibrium and the optimum <u>do not</u> approach each other. The reason is that high cross elasticities keep the number of profitable programs down. It is for this reason that advertiser supported TV may be preferable for a group of close substitutes. It is also why forbidding advertising on pay TV is a risky strategy.

The difference between the equilibrium and the optimum is determined by the difference between ϕ and $x\phi'$. If ϕ is close to being linear,

own price elasticity is high and ϕ and $x\phi'$ are close in value. The optimum and the equilibrium would not then be far apart. If ϕ is sharply concave, own price elasticity is low; ϕ and $x\phi'$ differ considerably and the equilibrium is further from the optimum.

Footnotes

1/ The major papers are those of Steiner [1954], Rothenberg [1962], and Wiles [1963]. For a critical survey of this literature, see Chapter 3 of Owen, Beebe and Manning [1974]. The traditional approach is to measure welfare by seeing which policy produces the largest audience, or the most "first choices" in viewers' rank orderings of the programs. This ignores intensity of preferences.

2/ The scarcity argument is ambiguous. There are probably too few VHF stations in the larger cities, given the FCC policies with respect to geographical distribution of stations. On the other hand, a fourth network might not be viable (see Park [1973]), and some UHF licenses go begging. Thus, given advertiser support and other FCC policies, the number of channels in many areas may not be far from its free entry equilibrium. None of the foregoing should be confused with the (erroneous) argument that the electromagnetic spectrum as a whole is "intrinsically" characterized by a scarcity transcending that of other resources. (See Greenberg [1969], Levin [1971].)

3/ Cable television is simply television by wire. The wire makes it easier to exclude and bill people who consume the product. Also, the wire's capacity is not constrained (yet) by FCC policies: it has "unlimited" channels.

4/ E. g., Steiner [1954].

5/ Willig [1973] has shown that even when income effects are present, the percentage errors involved in taking areas under Marshallian demand curves may not be too large.

6/ Spence [1974] contains a fuller treatment of the problem.

7/ The results we derive using this functional form hold in a more general setting. The general forces at work in product selection under monopolistic competition are discussed in Spence [1974]. Here, competition under pay TV will correspond to monopolistic competition. The benefit function, $B(x)$, is the multi-market surplus gross of costs. It can be written (in terms of inverse demand functions),

$$B(x) = \sum_{i=1}^{n} \int_{0}^{x_i} p_i(x_1,\ldots,x_{i-1},s_i,0,\ldots,0)ds_i \quad ,$$

the form that most economists are used to.

8/ This amounts to assuming that the demand for advertising is highly elastic above the market price.

9/ Thus we assume the game is played in quantities and the equilibrium is the Nash equilibrium. Price competition would generate somewhat different equilibria, but the qualitative properties would be the same. If the conjectural variation is to hold quantity constant, then firms anticipate price cuts in response to their own price cuts. This does not seem an entirely unreasonable assumption.

10/ Since $\pi_i = a_i\beta_i x_i^{\beta_i} - c_i x_i - F_i$, it is maximized with respect to x_i when $\partial\pi_i/\partial x_i = a_i\beta_i^2 x_i^{\beta_i - 1} - c_i = 0$, or $x_i = (a_i\beta_i^2/c_i)^{1/1-\beta_i}$. At that point, $\pi_i^* = c_i((1/\beta_i) - 1)(a_i\beta_i^2/c_i)^{1/1-\beta_i} - F_i$. Similarly $\Delta T_i = a_i x_i^{\beta_i} - c_i x_i - F_i$ is maximized with respect to x_i when $x_i = (a_i\beta_i/c_i)^{1/1-\beta_i}$. At that point $\Delta T_i^* = c_i((1/\beta_i) - 1)(a_i\beta_i/c_i)^{1/1-\beta_i} - F_i$. Thus comparing π_i^* and ΔT_i^*, we have

$$\pi_i^* + F_i = \beta_i^{\frac{1}{1-\beta_i}}(\Delta T_i^* + F_i)$$

as asserted.

11/ Let $n(\beta) = \beta^{1/1-\beta}$. When $\beta = 0$, $n(\beta) = 0$, and when $\beta = 1$, $n(\beta) = 1$. Moreover, $\log n(\beta) = (1 - \beta)\log \beta \leq 0$, so that $0 \leq n(\beta) \leq 1$ for all β. Taking logs and differentiating we have $n'(\beta)/n(\beta) = (1/\beta) - 1 - \log \beta > 0$, so that $n(\beta)$ is monotonically increasing on the interval $[0,1]$.

12/ Monopoly, in addition to having the biases just described for competitive advertiser support, also tends to restrict the number of programs. It does this because the profits of a new program are greater than its contribution to industry profits, due to the substitution effect. An extreme special case of this tendency is referred to as common denominator programs in the literature (see Rothenberg [1962]). There is a collection of programs among which there are no substitution effects. Then there is a program that interacts with each of the others. In terms of the matrix of cross partials, the

pattern is the following,

$$A = \left(\begin{array}{c|c} 0 & \begin{matrix} A_{1n} \\ A_{2n} \\ \vdots \\ A_{n-1,n} \end{matrix} \\ \hline A_{n1},\ldots,A_{n,n-1} & 0 \end{array}\right)$$

The n-th program is a common denominator (LCD). Suppose the common denominator is supplied and that the remaining programs are profitable even so. Competition would introduce the remaining programs and possibly drive the LCD out. The monopolist, however, may not introduce the non-LCD's because the net effect on profits is negative. This is usually thought to be bad for welfare. But the conclusion is unwarranted without further assumptions (see the section on numbers of programs).

It is, however, true that monopoly under advertiser support is more sparing in its supply of programs. And if there are two few programs under competition, monopoly will be less desirable. The evidence cited later seems to us to indicate that competition with advertiser support generates too few programs. In any case, LCD's are simply a special case of the monopoly tendency to restrict programs relative to competition with advertiser support.

13/ For the linear case, $p_i = a_i - 2A_{ii}x_i - c_i$. At the optimum, $p_i = 0$, or $x_i = (a_i - c_i)/2A_{ii}$. The contribution to surplus is $\Delta T_i = (a_i - c_i)x_i - A_{ii}x_i^2$. At the optimum, $p_i = 0$, and

$$\Delta T_i^* = \frac{1}{4}\frac{(a_i - c_i)^2}{A_{ii}} .$$

Profits are $p_i x_i - F_i = (a_i - c_i)x_i - 2A_{ii}x_i^2 - F_i$. They are maximized when $x_i = (a_i - c_i)/4A_{ii}$. At that point

$$\pi_i^* = \frac{1}{8}\frac{(a_i - c_i)^2}{A_{ii}} ,$$

as asserted.

14/ The price system can be thought of as a voting system of the following type. A program is accepted if a group can be found that will vote for it (provided every member of the group pays the same fee) and such that the fee times the size of the group covers the costs. What one wants of course, is to allow members of the group to pay different amounts. This amounts to price discrimination which is the requirement for any voting scheme to generate the efficient amount of a public good (see Demsetz [1974], Oakland [1974], and Thompson [1968] on public good aspects of TV).

15/ The optimum in fact occurs when for each i, $\partial T/\partial x_i = \phi_i' - 2\sum_j A_{ij}x_j + z$ $= p_i + z = 0$. Thus at the optimum $p_i = -z$, for all i. However, even if TV were subsidized, negative prices might be infeasible because people could leave their television sets on (without watching) to earn money. Thus, in what follows, the optimum is approximated by $p_i = 0$ $i = 1,\ldots,n$, which is the pattern of pricing under advertiser supported TV.

16/ The reason is that at S, an iso-total surplus line is tangent to the line $R_x = 0$. At T, an iso-total surplus line is tangent to $R_n = 0$. If S and T coincided at E, the isosurplus line through E would be tangent to two lines that cross, which is impossible.

17/ This is argued in the ~~appendix~~ addendum.

18/ See Steiner [1954].

19/ This can be stated more precisely. Suppose that $\phi(x) = dx^{\beta}$. It follows that average benefits are

$$a = d(1 - \beta)y^{\beta-1} - Ay \quad .$$

This function increases with d, decreases with A, and decreases with y. The derivative with respect to β is

$$\frac{da}{d\beta} = y^{\beta-1}[d(1 - \beta)\log(y) - 1] \quad .$$

It has an ambiguous sign. However, if β is near 1 it is negative and if β is small, it is positive.

20/ It is conceivable that the equilibrium, E, under pay TV, has more programs than the optimum constrained to nonnegative profits. That would provide a rationale for restricting channels under pay TV. But the information required to determine that such a restriction would be desirable is unlikely to be available.

21/ It is a general theorem that perfect price discrimination under monopolistic competition eliminates the product choice problem (see Spence [1974]). A special case is monopoly: there profits and the total surplus are the same.

References

Demsetz, H. [1970], "The Private Production of Public Goods," Journal of Law and Economics, v. XIII (October).

Greenberg, E. [1969], "Television Station Profitability and FCC Regulatory Policy," Journal of Industrial Economics, v. 17 (July).

Hotelling, H. [1929], "Stability in Competition," Economic Journal, v. 34 (March).

Levin, H. [1971], The Invisible Resource, Johns Hopkins Press.

Noll, R., M. Peck, and J. McGowan [1973], Economic Aspects of Television Regulation, Brookings.

Oakland, W. H. [1974], "Public Goods, Perfect Competition, and Underproduction," Journal of Political Economy, v. 82, n. 5 (September/October).

Owen, B., J. Beebe, and W. Manning [1974], Television Economics, D. C. Heath.

Park, B. [1973], "New Television Networks," RAND Report R-1408-MF (December).

Rothenberg, J. [1962], "Consumer Sovereignity and the Economics of TV Programming," Studies in Public Communication, v. 4 (Fall).

Spence, M. [1974], "Product Selection, Fixed Costs and Monopolistic Competition," draft.

Steiner, P. [1954], "Program Patterns and Preferences and the Workability of Competition in Radio Broadcasting," Quarterly Journal of Economics, v. 66 (May).

Thompson, E. [1968], "The Perfectly Competitive Production of Public Goods," Review of Economics and Statistics, v. 50 (February); (see Comments and Reply, Review of Economics and Statistics, v. 51 (November 1969], 475-82.

Wiles, P. [1963], "Pilkington and the Theory of Value," Economic Journal, v. 73 (June).

Willig, R. [1973], "Welfare Analysis of Policies Affecting Prices and Products," Research Memorandum No. 153, Center for Research in Economic Growth, Stanford University (September).

CHAPTER 5: CONCLUSION

In reviewing public policy decisions, judicial, legislative and administrative, in the mass media field, an economist cannot help but be dismayed. The natural tendency of policy-makers and jurists, even of legal scholars, seems to be to engage in direct or indirect regulation of conduct or behavior, despite the obvious conflict with the first amendment. This has resulted, at least in broadcasting, in tortured and proscrustean interpretations of the amendment, in order to justify the desired level and kind of intervention. And on those occasions when policy-makers have ventured into issues of structure, the results have often been equally unhappy, especially in television spectrum allocation decisions.

Still, it is structure that is crucial. The first amendment bars regulation of conduct; even if it did not, structure would be in nearly every case a preferable avenue to valid policy objectives. It is not possible or desirable to legislate fairness; it is both possible and desirable to structure an industry that is workably competitive and which therefore is conducive to freedom of expression. The best precedent for this may be the Paramount case. Knowing that structure is the key policy variable is only part of the answer, however. One must still decide which of the many possible structures is best; seldom will there be any ideal solution. Our public decision-making systems are biased against structural solutions to economic problems, precisely because they are so difficult to conceptualize. It is much easier to pass a law making bad behavior illegal, without removing the incentive for that behavior.

The legislation of structures for which there is only analogous precedent simply appears too risky to decision-makers; moreover, it inevitably requires a reshuffling of benefits in directions having no effective constituency. The benefits of structural reform accrue to someone, but that someone has in the status quo no interest to protect, and no base of organization.

These considerations suggest that we need a new way of making industrial structure decisions, and that the decision-making process should include more effectively the expertise of economists, industrial engineers, and other specialists who are not frightened by the notion of structural change. Further explanation of these issues would take us far afield, but it is an important problem nonetheless.

A Policy Shopping List

It seems useful here to provide a summary of the major policy conclusions of the preceeding chapters. This will be done by setting out a shopping list of desirable policies or policy changes. I have not felt constrained in constructing this list, by notions of political feasibility, although these are obviously important. A list which took political feasibility into account would be a good deal more modest.

A. Newspapers

1. Antitrust activity seeking to preserve head-on, same city newspaper competition as traditionally conceived should be abandoned.

2. Antitrust and legislative action should be undertaken to divest newspaper printing and delivery systems from editorial and newsgathering services. Daily newspaper printing and delivery businesses if necessary should have a quasi-public utility status; at least they should be barred from entering into exclusive contracts with producers of editorial and advertising content.

3. The courts should continue, as in Tornillo, to reject the notion that there is any right of access to the editorial function of a newspaper. But they should recognize the constitutionality of a right of paid access to the means of transmission generally, including newspaper printing, if such a right is legislated. (Arguably, the courts might recognize such a right in the absence of legislation, but this is much more tenuous.)

4. Newspaper-television cross-ownership in the same city should be prohibited.

5. The editorial and newsgathering processes should not be regulated by government.

B. Broadcasting

6. The Congress should establish private property rights in the electomagnetic spectrum, and sell it off at auction to the highest bidders. At a minimum, this should be done for that part of the spectrum presently occupied by VHF and UHF television and all radio stations.

7. The licensing and other regulatory authority over broadcasting content exercised by the FCC should be abolished.

8. The antitrust division should be free to seek structural remedies for network power, including such possibilities as limiting any one network to 24 continuous hours of operation per week.

9. The FCC rules against pay-television should be eliminated, and Congress should not enact laws to replace them.

10. All public television stations should be turned over to commercial operators. Congress should subsidize cultural and educational programming, if at all, through grants allowing paid use of commercial stations.

11. Congress should make cable television systems into (at least quasi-) common carriers, to which there is a right of non-discriminating paid access, and in which there is no control of program content by the system owner or any regulatory authority.

C. Motion Pictures

12. There should be continued strict enforcement of the Paramount decision and the policy which underlines it.

D. Periodicals

13. Congress (but not necessarily other postal patrons) should subsidize small-circulation periodicals by lowering the cost of transmission through the postal system.

Freedom of Expression in the Twentieth Century

It cannot be argued with any assurance that the diversity of sources of political news and ideas has decreased over the past seventy-five years, although it is tempting to try to make this case.

We know for sure that the number of daily and weekly newspapers has declined significantly in this century, and that the number of "independent" newspapers (not owned by chains or other media conglmerates) has declined still further. On the other hand, radio and television have risen to take the place of newspapers.

Thinking now of the role of the press as a political "watch-dog" on the national scale, we have to ask whether the number of independent "gatekeepers" - persons with discretionary editorial power - has declined. To the extent that local newspapers obtain their national news from the wire services, A.P. and U.P.I., not much has changed, except that there has probably been an increase in the degree to which these wire services have exercised editorial control over the content of their stories: that is, an increase in the number of reporters working directly for the services, rather than for cooperating newspapers whose editors decide what gets on the wire. On the other hand, it is not clear that the number of newspapers with independent national news bureaus (particularly in Washington) has decreased; certainly the White House press corps has increased in size. Television and radio stations are

not independent sources of national news and opinion, since nearly all of their material comes from the three networks and the two wire services. There has also been, probably, a significant increase in semi-private publications of the "newsletter" type, particularly those oriented to members of various organizations. It is hard to evaluate the importance of this trend.

Meanwhile there has been an enormous change in the pattern of information-seeking by consumers, such that the political and social importance of the television networks is far out of proportion to their relative numbers. Almost certainly the concentration of "influence" with respect to certain issues has increased because of this. The networks in turn are influenced by a very few newspapers. (Mainly the New York Times and the Washington Post.) If the three networks decide not to carry a story, there exists a cadre of informed people who may have read the story in one of these few newspapers, and who may call the networks to account. But this accounting will take place in the pages of the Columbia Journalism Review, and not before the public at large. It is difficult to make the case that any concentration of power equivalent to this existed at the turn of the century or earlier.

The important point is that one must weight the gatekeepers by their influence in terms of audience size. When this is done, it is reasonably clear that the twentieth century has witnessed a decline in the effective number of independent mass sources of national political news and ideas. At the same time, it can be argued that there has been an increase in the number of "organizational" house organs (union and

company newspapers, newsletters, and publications of interest to members of various special interest organizations.) This change no doubt reflects a number of changes in social and cultural patterns, including increasing population size, increasing mobility, and possibly increasing homogeneity of tastes within society, as well as those factors on the production side of the media which favor increasing concentration. The net effect may well be to make members of special interest groups rather better and more easily informed than they used to be, and even to make the public at large better informed, even though concentration of control over mass dissemination may have increased.

The picture is much clearer when it comes to local media. The local newspaper is, with respect to local political events, almost universally a monopolist, with only the most distant and tangental competition from other newspapers, and little more from the electronic media. There is not and there cannot be under present institutional arrangements anything like freedom of access for local speakers to local audiences through the media. Coverage of local events is controlled by monopoly gatekeepers.

Economics and Freedom of Expression

Freedom of expression to the framers of the first amendment seems to have meant the opportunity to put before the public partisan political ideas without fear of government intervention. The issues of today are different. There were no mass media in 1791. There was no private monopoly power in the media. We are on our own in dealing with these issues, for little insight can be gained from the wisdom of the framers themselves.

Appropriate policy today seems to require that we minimize the economic and institutional barriers between potential speakers and their audiences. This is not by any means the same as ensuring that people are "informed" by agents of the government. It is not the same as ensuring that the media are "balanced" or "fair." Achieving this goal requires that the heavy hand of an increasingly paternalistic government be lifted from the controls of the editorial and creative stages of message production, and it requires new institutional structures surrounding access to the means of transmission of messages. What lies between speakers and their audiences are presses, cables, wires, and broadcast transmitters. Just as it is inconsistent with competition and freedom for government to control who shall use these engines of mass speech, so it is inconsistent to allow them to fall into the hands of a few economic agents, however responsible they may claim to be. It is wrong for anyone but the individual editor to control individual editorial systems, but it is also wrong to allow the fortuitous monopolist of the press or the transmitter to be his own editor.

A right of access to the means of transmission is not obviously inherent in the constitution; it must be legislated. Such a right does not require direct government supervision of the behavior of the owners of the means of transmission, but can be encompassed by structural reformation through legislation and antitrust activity. There is a significant difference between direct utility regulation and laws mandating certain kinds of behavior which can be enforced in the courts.

The courts, despite the increasing burden they carry, are a far safer place for enforcement of first amendment rights than administrative agencies.

It is absolutely crucial, however, that both courts and legislators begin to understand the economics of media behavior. We have all listened too long to the so-called expert administrative and executive agencies in this field. These "experts" are in fact seldom expert at anything but retaining their own perogatives and jurisdictions which depend on continued support from the industries whose economic interests they so consistently protect at the expense of the public's interest in competition and freedom.

What has happened to the media over the years as concentration increased is this: thoughtful members of the industry have begun to realize that they are the arbiters of mass speech. They have reacted by institutionalizing their judicial role by developing notions of fairness and responsibility. "Due process" has become part of the editorial process itself. In broadcasting, of course, due process has been institutionalized through the fairness doctrine and the license renewal process. But we need to reexamine the assumptions which lie behind this trend. Granted that due process is better than arbitrary action, do we have to accept the notion that we must be at the mercy of a system requiring such institutional checks? It would be easy to attack the notion that such procedural safeguards as exist are effective. But this is the wrong track. We do not want a fair and balanced press. We want

a system of expression which is "robust" and partisan and impassioned. To be sure, there are economic as well as technological and social limits to our ability to achieve this, but we are a long way from doing as much as we can to achieve it.

The reaction of private and public individuals to growing concentration in the mass media has been understandable. It is natural in our system to seek to attenuate arbitrary power by imposing procedual safeguards. Often this is just the right policy, particularly if one grants the necessity for the existence of the power in the first place. But in the first amendment field this is just not good enough. We do not have to and we should not accept the premise that editorial monopoly is inevitable. The editorial process is not naturally monopolistic, though the means of transmission often are. But the means of transmission are not themselves affected with a public interest stemming from the first amendment. No one would assert that paper factories or delivery trucks are infused with first amendment immunities; the same is true of printing presses and broadcast transmitters. What the first amendment does protect is the inviolability of the creative and editorial processes; what it seems to me to mandate under modern conditions is that these processes be given competitive access to the technical means of reaching the public. I do not think it is necessary, from a practical standpoint, to make broadcast transmitters and printing presses into rate regulated common carriers like the telephone company, but such action is consistent with the first amendment. At least, it is much

more consistent with the first amendment than setting up the owners of these particular pieces of capital equipment as licensed arbiters of who shall speak and who shall not.

It may very well be that all of this is politically impossible. For that reason, we have to depend heavily on the advent of new technologies, such as cable television, to provide suitable and feasible opportunities for taking a more logical and consistent view of first amendment freedoms. Some legislation affecting cable television regulation is perhaps inevitable. The opportunity this will afford to remedy our past mistakes should not be missed. But we cannot go half-way. Cable will not grow to be a significant means of transmission unless consumers are allowed to pay for the information and other services it can provide. It is difficult to find a rationale in <u>any</u> of the theories of the first amendment, much less the rest of the institution, for our continued egregious kow-towing to the vested interests opposing pay television. That their power to influence political men stems in large part from widespread and emotional public misunderstanding of the consequences of pay television is little excuse for inactivity in such a crucial area of first amendment concern. Among all the sins of this FCC, the rules against pay TV and cable growth are by far the most impeachable offenses.