Of the two high-subscriber networks, FX is a general entertainment network while HGTV is a niche (home and garden) network. At the same time, the lower-subscriber Game Show has narrow programming but with potentially broad appeal; for example, the perennially top-rated broadcast syndicated program, *Wheel of Fortune*, and the recently top-rated prime-time network program, *Who Wants to Be a Millionaire?*, were both game shows.

Given the roll-out of new program services, immediate carriage by 15 million subscribers is not a requirement. At least nine of the entrants on Table 1 did not reach 15 million subscribers in their first *four* years, but are still in existence.

B. The assumption of a static 50 percent penetration rate fails to capture variations over time and among services

The assumption of a 50 percent penetration rate fails to account for variations in the same service over time and variations across differentiated program services. The Commission's primary basis for this assumption was the average penetration for a large group of program services at one point in time.[33] As already discussed, a program service typically achieves increasing subscribers or penetration over time, with different services achieving higher or lower penetration depending on relative attractiveness and their target audience. An average penetration rate will necessarily reflect the mix of established services with higher penetration rates and newer services with lower penetration rates at that particular point in time. It will also reflect the mix of broadly attractive services with higher penetration rates and both narrowly targeted services and less attractive services with lower penetration rates. As a result, an average penetration rate does not represent a meaningful measure of the size of the "open field" for a new program service. The experience of mature, attractive services demonstrates that near-universal penetration is achievable for services that are highly valued by MVPD subscribers. The October 2001 Kagan network census shows 21 basic program services with 80 million or more subscribers. One of the basic program service entrants since 1992 has

---

[33] Third Report and Order, October 20, 1999, ¶¶48-49. The Commission also considered that cable operators offer tiers taken by varying percentages of the system's subscribers. However, both the tier in which the service is placed and the percentage of subscribers who take the tier are reflections of the attractiveness of the service to subscribers. Further, tier penetration may increase over time. As noted above, digital tiers are expected to increase from 15 percent penetration in 2000 to 70 percent in 2005.

already exceeded 80 million subscribers and another eight have already exceeded 70 million. (See Table 2.) Accordingly, the 50 percent average penetration rate figure used by the Commission tells us nothing about the long-run market opportunities available to attractive program services.

C. There is no evidence that the two largest MSOs would, either through collusion or unilateral behavior, collectively refuse to carry an attractive program service

1. Past behavior provides no pattern of coordinated refusals to carry individual program services

Large MSOs have adopted diverse strategies regarding carriage of new program networks rather than strategies consistent with formal or tacit collusion. As Graph 7A shows, in 1996 the top five MSOs had different carriage patterns for 1992-95 entrants.[34] For example, one carried MuchMusic, two others carried Z Music and the remaining two (plus TCI which carried Z Music) carried MOR Music. While all five MSOs carried Cartoon and FX, the extent of their carriage varied widely, with Cox's carriage much greater for Cartoon and TCI's much greater for FX. As Graph 7B shows, carriage rates for the same networks in 2000 are generally higher and still different across MSOs (except for networks carried at high rates by all five). Graph 7C shows carriage rates in 2000 for 29 newer entrants. Again, the carriage patterns differ. Charter carries only a few of these networks while AT&T carries almost all. Moreover, a previous study demonstrated that large MSOs carry more services than small MSOs and this effect is most pronounced for the two largest MSOs.[35]

2. Collective behavior is unlikely

It is not surprising that there is no evidence that the largest MSOs engage in coordinated behavior to refuse to carry individual program services. For MSOs that do not have ownership

---

[34] The MSO data shown on Graphs 7A-C are based on carriage on their systems with 20,000 or more subscribers that reported current data to Warren Publishing in 1996 and Warren Communications News in 2000. The carriage rates are the number of subscribers in those systems that carry the network as a percent of all subscribers in the data set for a given MSO.

[35] Dertouzos and Wildman.

interests in program services, there is no incentive to collude with one another. They do not compete with one another for subscribers or as buyers of programming. We have already demonstrated that they will not achieve lower prices for program services that they do carry by collectively refusing to carry new program services. The only consequence of an agreement between MSOs not to carry an attractive program service is that they both would lose subscribers and profits. This would be irrational.

Hypothetically, vertically integrated MSOs might, under some circumstances, have an incentive to collude to refuse to carry a specific program service that competes directly with one they own; however, as we discuss further below, the evidence shows that large vertically integrated MSOs carry *more* basic programming—both affiliated and unaffiliated—than do small MSOs, so at the outset there is no empirical basis for the theory. Moreover, even if vertically integrated MSOs had an incentive collectively to refuse to carry an attractive program service, it is unlikely that they would be able successfully to act on this incentive. Program service suppliers are likely to notice common refusals by two large MSOs to carry attractive program services that otherwise have widespread carriage and bring this behavior to the attention of enforcement agencies. Formal collusion is illegal. Tacit collusion between MSOs or unilateral behavior that would lead different MSOs to reject the same program services is also unlikely given the attributes of the program supply and MVPD segments of this industry. The opportunity costs of failing to carry an attractive service are likely to differ widely among MSOs. Specific systems for these MSOs have widely different channel capacities, consumer characteristics (regional differences), competitive constraints and program affiliations. Program services are differentiated products whose financial attractiveness to an MSO depends on subscriber characteristics, channel capacity and the existing program line-ups across the MSO's systems. Program carriage contracts involve complicated MSO-specific non-linear pricing terms, subscriber goals, marketing support provisions, etc. upon which tacit collusion or unilateral behavior leading to identical results would be very difficult. These industry characteristics make reaching a formal or tacit agreement, policing it and punishing cheating extremely difficult.

D. The Growing Importance Of DBS Makes the Assumptions More Implausible

The growth in the penetration of DBS makes the assumption that the largest MSOs will coordinate refusals to carry specific programming decisions even more doubtful than it was when the horizontal ownership rule was adopted. DirecTV is presently the third largest operator and EchoStar is among the top ten. If their proposed merger is approved, the resulting DBS provider will be number one or two.[36] DBS providers have been successful in attracting subscribers from cable MSOs by trying to offer a larger and more attractive programming menu. There is no evidence that DBS suppliers are coordinating behavior with the largest MSOs to restrain program carriage. To the contrary, DBS has increased the incentives for all MSOs to add channel capacity and program services.

Moreover, DBS providers have 17.2 million subscribers as of November 2001. When DBS providers choose to carry a service they make it available to 100 percent of their subscribers at the outset. As a result, carriage by DBS alone in popular DirecTV and EchoStar packages gives new basic networks immediate access to a large number of subscribers. For example, at the end of 2000, when DBS had just under 15 million subscribers, both DirecTV and EchoStar carried several 1998 and 1999 entrants in their popular packages, including Toon Disney and Noggin.[37] These two program services each had 15 or 18 million total subscribers at the end of 2000. (See Table 1.) Accordingly, DBS provides a large potential market for new program services that alone can provide enough subscribers to pass the Commission's 15 million subscriber threshold upon which the horizontal ownership rules were based.

V. THE EFFECT OF VERTICAL INTEGRATION

Vertical integration does not change the conclusion that increasing MSO size is unlikely to deter entry.

---

[36] FCC, *Seventh Annual Report on the Status of Competition*, January 8, 2001, Appendix C, Table C-3.

[37] *Sky Report*, November 2001 (Online); DBS Satellite Comparison, December 20, 2000 (Online).

A. Motivation for and benefits of vertical integration between MSOs and program services

It is widely recognized the vertical integration can reduce costs and help to promote the development of new services. This is especially the case for program services because of significant uncertainties about future costs and revenues. By taking an equity stake in a new program service, an MSO can better protect its own investments in carrying and promoting a new program service from future hold-ups if the service is very successful and avoid the costs of haggling and associated bargaining failures later as the uncertainties about the program service's costs and revenues are resolved. Vertical integration between program producers and/or syndicators and program services solves similar problems at an earlier stage of the production process. At the same time, entering into a contract with a large credit-worthy MSO provides a valuable signal of quality and viability to creditors and other potential program buyers. Such contracts make it easier for the programmer to obtain financing and to attract additional customers. Vertical integration is often, but certainly not always, an attractive governance arrangement because it creates a win/win opportunity for the MSO(s) and the programmer to create and market successfully and economically a new program service.

Indeed, there is substantial diversity in ownership arrangements among program services. Program services tend to be owned by cable MSOs, broadcast networks and program producers. Cable network group owners include the cable operator, broadcast network owner and program producer, AOL Time Warner, the broadcast network owners and program producers, Viacom, Disney, News Corp./Fox and GE/NBC, the program producer, Vivendi, and the cable operators, Comcast and Cablevision. In addition, due to economies of scope (including the ability to cross-promote sister program services), there are families of cable networks.[38]

Cable operators that have extensive ownership interests in cable program services tend to carry more total programming as well as more affiliated programming. These effects are dominated by the behavior of the largest MSOs. Large MSOs also have lower prices.[39] They

---

[38] *Cable Program Investor*, September 11, 2001, p. 4.

[39] Dertouzos and Wildman.

have also been most active in deploying cable modems and telephony services. These performance attributes suggest that MSO size plus vertical integration leads to greater consumer welfare.

The observation that cable operators are more likely to carry program services in which they have a financial interest than are cable operators without such a financial interest does not imply that these decisions are anticompetitive or socially undesirable. Indeed, such an observation should be expected because the fact that the cable operator invested in the service reflects (a) its conclusion that the service is likely to be attractive and successful, (b) that contractual hazards have been mitigated, (c) and that inefficiencies associated with double marginalization have been mitigated as well.

B. Foreclosure Concerns

The Commission and Congress have been concerned that cable operators with financial interests in program services will foreclose competing program services. This concern is the source of various restrictions on carriage and contractual arrangements involving program services in which a cable operator has a financial interest.[40]

1. What foreclosure does not mean

The term "foreclosure" must be defined carefully, especially if it is used to indicate anticompetitive behavior. A cable operator may decide not to carry a particular program service because it is not profitable to carry it. In making this decision there is nothing wrong from an efficiency perspective with an MSO taking into account the impact on the revenues and costs associated with affiliated program services carried on *its* systems. There is nothing anticompetitive about a decision not to carry a program service on some or all of its systems because carriage is unprofitable compared to alternatives. This includes decisions to carry affiliated program services because their costs are lower or their revenues are expected to be higher than alternatives, without considering any effect on unaffiliated program service suppliers. While in some sense the program supplier is in this case being "foreclosed" from

[40] See 47 U.S.C. § 536(a); 47 C.F.R. §§ 76.1300, 76.1301, 76.1302.

carriage on at least some systems by the cable operator, this is not anticompetitive foreclosure. And it is only anticompetitive foreclosure that should be of concern to the Commission.

2. Anticompetitive foreclosure

Anticompetitive foreclosure must involve a strategic decision not to carry an unaffiliated program service in order to maintain or increase the prices that can be charged by the affiliated program service to *other* cable operators. That is, anticompetitive foreclosure involves a strategic decision not to carry a particular program service because this decision reduces competition in the program services market by raising a program rival's costs or increasing the costs of entry of competing program services, and thereby enables the vertically integrated provider to charge higher prices for its affiliated program service than it would otherwise be able to do.

While such an anticompetitive foreclosure strategy may be theoretically possible, there is nothing in the empirical literature to indicate that it is a quantitatively important phenomenon that reduces consumer welfare in this industry. Anticompetitive foreclosure necessarily involves a tradeoff between the net cable subscription and cable advertising revenues lost by failing to carry an attractive service on an MSO's cable systems and the increased revenues that can be earned by charging higher license fees to other cable operators for the affiliated program service.

3. The profitability of anticompetitive foreclosure declines with MSO size

If such a strategy could be successful, it becomes less profitable as an MSO serves a larger fraction of the MVPD subscribers. Losses of subscriber and advertising revenues from not carrying an attractive program service increase with MSO size, while profits from raising prices by a given amount for competing affiliated program services charged to other MVPD operators fall as the fraction of outside subscribers declines.

4. The increased importance of program competition from DBS raises the cost of foreclosure

The increasing presence of DBS has further attenuated the success of any anticompetitive foreclosure strategy since 1992. DBS competes heavily based on the strategy of offering more programming. Historically, DBS providers have not been extensively integrated into programming services and have simultaneously sought to carry a large number of attractive program services to compete with cable operators.[41] This gives cable operators, vertically integrated or not, a greater incentive to add more programming. As discussed above, cable operators, including particularly large, vertically integrated MSOs, have added channel capacity and begun to offer more analog and digital program services.

5. Commission rules indirectly limit foreclosure

If the Commission continues to be concerned about anticompetitive vertical foreclosure problems, then these problems should be addressed directly rather than indirectly through horizontal ownership rules. Current Commission rules prohibit such discrimination.

VI. OTHER POTENTIAL PROBLEMS IDENTIFIED BY THE COMMISSION DO NOT JUSTIFY A HORIZONTAL OWNERSHIP RULE

The Commission suggests that there may be other possible competitive problems in addition to those that we have already discussed which may justify the horizontal ownership rule the Commission previously adopted. We disagree.

A. Competitive Disparity in Programming Costs

The Commission suggests that increases in horizontal concentration (greater monopsony or bargaining power) will increase the disparity between the prices paid for programming by large MSOs and smaller competitors and lead to less competition between

[41] DirecTV has a minority interest in Crown Media, owner of the Hallmark network. (Monica Hogan, "Hallmark Ponies Up for DirecTV Carriage," *Multichannel News*, August 27, 2001 [Online].) Vivendi just announced a ten percent investment in EchoStar and purchase of majority interest in the basic networks USA and SciFi. If the DirecTV-EchoStar merger is completed, Vivendi will have less than a five percent interest in the combined company. (Mike Farrell, "Messier Drops Second Shoe, Buying USA Content Assets," *Multichannel News*, December 24, 2001, p. 1 and "Vivendi and DISH: Money and More," *Sky Report*, December 17, 2001 [Online].)

them. There are several problems with this argument. First, as we have already discussed, large MSOs may be able to negotiate lower fees with program suppliers because of increases in efficiency created by these arrangements—a larger surplus to be divided between them. The relevant increases in efficiency go well beyond the direct costs associated with negotiating, monitoring and enforcing contracts and the costs of contractual failures, including bad debts. As explained above, large MSOs may be in a position to reduce a programmer's financing costs and facilitate its acquisition of carriage agreements with other smaller MSOs. Large MSOs may increase supplier surplus in other ways and share in the associated benefits through lower license fees without any increase or even with a reduction in their bargaining power.

Second, the Commission's argument is based on the assumption that the major competitors to the large incumbent MSOs will be very small MSOs which may pay more for programming and, as a result, that competitors will be limited to challenging small incumbents which pay comparable program fees. However, these assumptions are not consistent with the facts. Cable systems and other alternative distributors have overbuilt large MSOs as well as smaller operators, which suggests program price differences due to buyer size did not determine competitive targets. Further, competitive MVPDs are increasing in size and may be larger than the cable operators with which they compete. Both DirecTV and EchoStar are among the top ten (and will be number one or two if their merger is approved) and the overbuilders RCN and WideOpenWest (buyer of Ameritech's systems) are among the top 15.[42]

B. Incentive to Innovate and Offer a Variety of Programming

The Commission suggests that MSOs will have a lesser incentive to innovate and may be likely to offer a lesser variety of programming if *national* horizontal concentration of MVPDs increases. This argument confuses the market in which MSOs buy programming and the market in which they sell programming to final consumers. National concentration is relevant to the power of MSOs as buyers (monopsony power), not to the power of MSOs as sellers (monopoly power). Even if one were to assume that incumbent cable companies are

---

[42] *Cable TV Investor*, August 29, 2001, pp. 12-13; Linda Haugsted, "WOW Completes Purchase of ANM Systems," *Multichannel News*, December 3, 2001 (Online).

properly conceptualized as local geographic "monopolies" in the sales of video services to final consumers, increasing national MVPD concentration simply results in the aggregation of a set of local geographic monopolies that do not compete for subscribers. This aggregation cannot reduce competition for subscribers. In fact, cable MSOs, whatever their national size, face competition from DBS in program services, from local exchange carriers in Internet provider services, etc. This local competition has encouraged innovation (digital tiers, cable modems) and program variety in the past and will continue to do so in the future. Put another way, cable operators face competition from DBS and others, and large cable operators do not face less competition than small cable operators.

C. Benchmark Competition

The Commission suggests that local franchise authorities can better review cable franchisees based on benchmarking incumbents and new entrants against the performance of other MSOs. The argument appears to be that when there are more MSOs, more reliable benchmarks can be created. Before the 1992 Cable Act, franchise authorities exercised more control over cable franchisees, and in particular, which franchisee would get a de facto exclusive franchise to serve their communities for a specified term. In evaluating competing applications at the initial franchise stage and at the re-franchising stage, it may in fact have made sense for the franchise authorities to have relied on extensive benchmarking analysis to compare performance across systems. However, it has been our experience that in practice franchise authorities typically did not evaluate their franchisees based on the performance of several other cable MSOs. A common benchmark was other cable systems operated elsewhere in the country by the franchised MSO itself. Moreover, whether franchise authorities may have once relied on this kind of benchmarking is irrelevant today as a result of changes made to the franchising process by the 1992 Cable Act. Current law makes it clear that local franchise authorities cannot offer exclusive cable franchises and limits the control they have over who can offer cable service in their areas.

VII. Negative Effects of Subscriber-Limit Rule

To the extent that a 30 percent subscriber limit constrains the ability of MSOs to increase their size, it also limits the beneficial effects of larger MSO size. Large MSOs carry more program services. They have lower prices.[43] They have been most active in deploying cable modem and telephony services. Accordingly, Commission constraints on growth through merger and acquisition may lead to cost inefficiencies, delay the deployment of new products and services, and make it more difficult for program services to enter.

VIII. Conclusion

There is no empirical evidence to support a 30 percent subscriber limit as it relates to any effects of MSO size on program buying power and the supply of program services or other problems suggested by the Commission. In particular, none of the assumptions upon which the Commission relied to derive the 30 percent ownership rule are supported empirically. Even if a new program service required 15 million MVPD households, the Commission's first assumption, the entrant could reach this threshold without *any* carriage by cable MSOs, given the current size of DBS. Moreover, the theoretical underpinnings of the Commission's analysis are also deficient. The standard textbook monopsony model provides a misleading description of the supply and acquisition of program services. A more relevant theoretical model leads to the conclusion that larger MSOs have less bargaining power and confer efficiency benefits on program suppliers. In short, the 30 percent ownership rule is completely arbitrary. Further, there is not a problem with the supply of program services that needs to be fixed by regulatory restrictions. These considerations all lead to the conclusion that there is no basis for any generic horizontal ownership rule and that a 30 percent subscriber limit is potentially costly to consumers.

[43] Dertouzos and Wildman.

KAGAN NETWORK CENSUS: SUBSCRIBERS TO BASIC SERVICE ENTRANTS SINCE 1992
1992-2001

	Network	Launch	Year-End Subscribers (Million)									July
			1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
	Sci-Fi	Sep-92	11.0	15.6	17.4	27.4	38.2	46.9	53.0	59.8	67.3	71.9
*	Cartoon	Oct-92	4.0	9.1	12.5	23.6	31.8	47.1	55.4	61.0	69.3	74.6
	Outdoor Channel	Apr-93 [4]				na	na	na	na	5.3	8.1	11.0
	ESPN2	Oct-93		9.6	17.3	28.2	41.8	54.0	62.6	66.9	74.1	77.6
*	Food	Nov-93		5.7	10.0	15.2	19.2	29.8	37.1	44.2	54.5	62.0
*	Fox Health[1]	Dec-93		0.5	1.3	5.7	7.8	8.1	8.2	17.6	21.5	24.5
*	TCM	Apr-94			na	7.8	14.2	20.8	31.3	38.0	47.2	49.3 [6]
	FX	Jun-94			18.0	24.6	30.5	33.2	38.1	45.3	57.0	68.8
	MSNBC[2]	Jul-94			11.4	18.3	28.0	38.0	46.0	53.2	61.4	66.5
*	MuchMusic	Jul-94			na	3.6	6.5	11.0	14.5	15.0	17.8	14.5 [7]
*	Independent Film	Sep-94			1.0	3.0	5.5	9.0	12.0	11.2	14.0	19.6
*	Jones Computer Network	Sep-94			0.9	1.2	1.5	--	--	--	--	--
	Fox Movie Channel	Oct-94			na	na	5.0	6.0	8.0	12.0	13.0	15.0
	NewsTalk TV	Oct-94			1.0	3.0	4.0	--	--	--	--	--
	HGTV	Dec-94			6.5	10.0	22.0	36.1	48.4	59.0	67.1	71.1
	Game Show	Dec-94			na	na	5.0	12.0	18.5	25.4	31.2	37.0
	Bloomberg TV	Jan-95 [5]				na	na	na	na	na	na	17.3
	History Channel	Jan-95				10.2	29.4	44.1	54.6	61.7	69.6	74.0
*	Golf Channel	Jan-95				1.5	7.4	14.0	21.4	26.1	31.9	38.2
	ESPN Classic	May-95				5.2	9.0	11.9	15.7	20.0	30.0	37.2
*	Outdoor Life	Jul-95				2.0	5.5	13.5	18.0	23.0	26.0	36.0
*	CNNfn	Dec-95				na	7.4	9.4	11.1	14.1	16.5	17.2 [6]
*	Great American Country	Dec-95				na	1.2	1.5	7.3	12.8	14.7	14.8
	BET on Jazz	Jan-96					2.0	4.5	4.5	7.0	8.4	8.4
	Speedvision	Feb-96					8.0	14.5	20.0	25.0	33.0	42.1
	America's Health Network[1]	Mar-96					5.6	6.8	9.2	--	--	--
	TV Land	Apr-96					18.3	21.9	37.0	43.8	55.5	62.7
	Ovation[3]	Apr-96					ru	ru	ru	ru	ru	5.1
*	Animal Planet	Jun-96					na	31.4	45.6	54.4	66.3	71.6
	MTV2	Aug-96					3.6	9.0	10.1	11.7	21.2	31.9
	Fox News	Oct-96					17.0	24.0	36.4	44.0	57.5	68.6
	ESPNews	Nov-96					na	6.0	8.0	18.0	20.0	23.8
*	CNN/SI	Dec-96					na	10.8	14.5	15.6	16.0	16.7 [6]
*	WE: Women's Entertainment	Jan-97						ru	ru	19.2	25.0	26.0
*	Discovery People	Mar-97						7.5	11.0	5.0	--	--
	BBC America	Mar-98							na	na	na	19.9
	Toon Disney	Apr-98							10.9	14.0	17.8	24.6
	techtv	May-98							na	15.8	23.0	26.0
*	Discovery Health	Jul-98								10.0	21.5	27.0
	Lifetime Movie Network	Jul-98							na	na	11.6	17.5
*	style.	Nov-98							na	6.0	10.0	15.0
	Noggin	Feb-99								na	15.2	16.7
	Soapnet	Jan-00									6.0	13.4
	Oxygen	Feb-00									12.3	24.4
	National Geographic	Jan-01										14.1

* -- network is currently (or last) owned, wholly or partially, by an MSO
na -- not available
ru -- revised, unavailable (Kagan has restated or eliminated these subscriber counts in recent years)

[1] Cable Health Club was the predecessor to Fit TV (Source: Kagan, *Cable TV Programming*, 10/25/95, p. 12). Fit TV merged with America's Health Network on July 19, 1999 to form the Health Network/WebMD (Source: Kagan, *Cable Program Investor*, 8/13/99, p. 5 and NCTA, *Cable Televisions Developments*, Spring/Summer 2000, p. 78). At the end of June 1999, America's Health Network had 10.1 million subscribers. Fox bought the network in January 2001 (Source: *Multichannel News*, "News Corp Gets All of Health Network," January 8, 2001 [on-line]), and proceeded to sell it to Discovery Communications, Inc. under an agreement announced September 5, 2001 (Source: Kagan World Media, *Cable Program Investor*, September 11, 2001, pp. 1-2).

[2] In 1996 MSNBC acquired both the affiliates and corresponding subscribers from NBC-owned America's Talking (Source: NCTA, *Cable Televisions Developments*, Fall 1996, p. 65). America's Talking began in July 1994; MSNBC itself began in July 1996.

[3] Kagan has revised Ovation's 1996-2000 subscriber counts. No definitive year-end data are available.

[4] The Outdoor Channel's launch in 1993 is first mentioned in 1995 by Kagan and 1997 by the FCC (Source: Kagan, *Cable TV Programming*, 9/30/95, p.6 and FCC, Fourth Annual *Report on the Status of Competition*, January 13, 1998, Appendix F, Table F-2).

[5] Bloomberg TV is first mentioned in 1997 as being launched in January 1995 (Source: FCC, Fourth Annual *Report on the Status of Competition*, January 13, 1998, Appendix F, Table F-2).

[6] July data unavailable, latest data available reported in source.

[7] The last Kagan subscriber count for MuchMusic is 17.8 million in May 2000 (Source: Kagan, *Cable Program Investor*, 7/17/00, p. 10). The 2001 figures are obtained from *Cablevision* (9/17/01, p. 30).

Note: Includes services programmed 20+ hours per day.
Where name changes have occurred, the most recent names are used.
Some July 2001 data are for the quarter ending June.

Source:
Subscribers and Launch Dates: Paul Kagan Associates, Inc., *Cable TV Programming*, January 26, 1996, p. 12 and January 29, 1997, p. 12.
Paul Kagan Associates, Inc. and Kagan World Media, *Cable Program Investor*, January 16, 1998, p. 11, February 11, 1999, March 17, 2000, pp. 4-5, February 16, 2001, p. 5, and September 11, 2001, p. 10.
NCTA, *Cable Television Developments*, Fall 1994, Spring 1996, 2001
Ownership: FCC, Seventh Annual *Report on the Status of Competition*, January 8, 2001, Appendix D, Tables D-1 and D-2.
FCC, Third Annual *Report on the Status of Competition*, January 2, 1997, Appendix G, Table 1.
updated by Kagan World Media, *Cable Program Investor*, September 11, 2001, p. 4 and November 29, 2001, p. 1.

KAGAN NETWORK CENSUS: SUBSCRIBERS TO ENTRANTS AND OTHER BASIC SERVICES
October 31, 2001

Network	Subscribers (million)
TBS	86.2
Discovery	85.4
ESPN	85.3
USA	85.0
CNN	84.9
TNT	84.9
Nickelodeon	84.6
A&E	84.3
TNN	84.2
Lifetime	83.8
Family	83.5
Weather	83.1
C-SPAN	83.1
MTV	82.6
TLC	82.4
AMC	81.7
CNBC	81.5
ESPN2	81.4
Headline News	81.2
QVC	80.8
VH1	80.8
* Cartoon	78.1
History	78.0
Disney	77.2
Comedy Central	77.0
E!	75.8
* Animal Planet	75.6
Sci-Fi	75.6
HGTV	74.8
FX	74.0
Fox News	73.7
HSN	72.3
Fox Sports	72.2
MSNBC	70.8
BET	70.5
* Food	68.4
TV Land	66.0
C-SPAN II	65.6
Court TV	65.1

Network	Subscribers (million)
Bravo	62.5
Travel	60.1
TV Guide	57.2
CMT	54.4
* TCM	49.3 [1]
Speedvision	45.6
* Golf	44.7
ESPN Classic	42.4
Hallmark	40.8
Game Show	40.2
* Outdoor Life	38.0
MTV2	35.2
* Discovery Health	32.0
Sneak Prevue	30.0
techtv	29.5
Toon Disney	27.9
* WE: Women's Entertainment	27.0
Oxygen	27.0
ESPNEWS	26.6
* Health Network	25.7
BBC America	24.0
LMN	20.2
* Independent Film	20.1
Bloomberg TV	18.8
Noggin	17.5
SoapNet	17.4
* CNNI/fn	17.2 [1]
* CNN/SI	16.7 [1]
* Great American	15.6
INSP	15.6
National Geographic	15.2
* style.	15.0
FMC	15.0
Goodlife	12.2
Outdoor Channel	12.1
International	10.4
BET Jazz	8.4 [1]
Ovation	5.5

-- new entrants since 1992

* --entrant is currently owned, wholly or partially, by an MSO.

[1] Not provided in the October 31, 2001 network census, latest available data used.

Note: Some October 2001 data are for the quarter ending September.

Source: Subscribers: Paul Kagan Associates, Inc. and Kagan World Media, *Cable Program Investor*, April 26, 2001, p. 10, October 25, 2001, p. 10, and November 29, 2001, p. 8.

Ownership: FCC, *Seventh Annual Report on the Status of Competition*, January 8, 2001, Appendix D, Tables D-1 and D-2. updated by Kagan World Media, *Cable Program Investor*, September 11, 2001, p. 4 and November 29, 2001, p. 1.

New Entrants: Table 1.

RATINGS OF BASIC SERVICES
First Through Third Quarters, 2001

Network	Full Day Rating Q1	Q2	Q3
Nickelodeon/Nick at Night	1.40	1.36	1.43
Lifetime	1.25	1.20	1.27
* Cartoon	1.10	1.10	1.20
TBS	1.20	1.00	1.00
TNT	0.90	0.90	0.80
Disney	na	na	0.80
USA	0.85	0.81	0.78
A&E	0.92	0.79	0.78
CNN	0.40	0.30	0.70
Discovery	0.70	0.60	0.62
Fox News	na	0.30	0.60
ESPN	0.52	0.52	0.58
TLC	0.59	0.55	0.54
MTV	0.50	0.54	0.53
History	0.61	0.55	0.49
FX	na	0.52	0.48
Fox Family	0.49	0.46	0.47
Comedy Central	0.45	0.40	0.42
BET	0.35	0.39	0.42
TNN	0.50	0.44	0.41
TV Land	0.50	0.38	0.41
HGTV	0.44	0.39	0.39
Sci-Fi	0.43	0.38	0.39
* Animal Planet	0.36	0.34	0.35
Court TV	0.40	0.31	0.33
Headline News	0.20	0.20	0.30
* Food	0.30	0.30	0.29
TV Guide	0.28	0.29	0.29
E!	0.34	0.29	0.29
Weather	0.30	0.28	0.27
ESPN2	0.21	0.21	0.25
VH1	0.30	0.23	0.22
Travel	0.27	0.17	0.22
CMT	0.21	0.19	0.17
CNBC	0.38	0.32	na
MSNBC	na	0.30	na

-- new entrants since 1992
* -- entrant is currently owned, wholly or partly, by an MSO
na -- not available

Note: The full day is Monday to Sunday, 6 AM to 6 AM.
The following networks have shorter than 24-hour periods:
A&E, Animal Planet, CNBC, Comedy Central, Court TV, Discovery, E!, Food, Fox Family, FX, HGTV, History, Lifetime, TLC, TNN, and Travel.

Source: Ratings: Paul Kagan Asssociates, Inc. and Kagan World Media, *Cable Program Investor*, May 24, 2001, p. 11, September 11, 2001, p. 7 and November 29, 2001, p. 5.
New Entrants: Table 1.

SALES OF BASIC SERVICE ENTRANTS SINCE 1992

Date	Network	Sale Price[1]	Subscribers	Estimated Cash Flow[2]
		(million)	(million)	(million)
Oct-95	FX	$ 400	25.0	$ (52.2)
Dec-95	America's Talking	440	20.0	na
May-96	Food Network	223	25.8	(17.1)
Aug-96	Golf Channel	150	3.8	(35.1)
Jun-97	techtv	162	9.0	na
Sep-97	Classic Sports	175	10.4	(5.9)
Dec-98	Eye on People	100	11.0	(29.6)
Nov-99	techtv	320 [3]	14.0	(29.0)
Feb-00	Golf Channel	678	30.0	35.6
May-01	Speedvision	751	42.0	(0.5)
May-01	Golf Channel	1,177	33.4	56.6
May-01	Outdoor Life	615	36.0	(5.1)

na -- not available

[1] The implied value for 100% ownership of the network.

[2] In year of sale

[3] Vulcan Ventures bought 33% of techtv for $54 million in November 1998 and 64% for $204.8 million in November 1999. The implied value of the November 1999 purchase is $320 million.

Note: Does not include sales involving more than one network

Source: Sale Price and Subscribers: Paul Kagan Associates, Inc. and Kagan World Media, *Cable Program Investor*, May 17, 2000, p. 5, June 30, 2001, p. 8 and November 29, 2001, pp. 1-2.
Cash Flow: Paul Kagan Associates, Inc., *Cable TV Programing*, September 30, 1996, p. 4 and *Cable Program Investor*, February 24, 1998, p. 5, April 13, 1999, p. 10, April 14, 2000, p. 5 and May 24, 2001, p. 6.

PROGRAMMING EXPENSES PER AVERAGE SUBSCRIBER FOR BASIC SERVICE ENTRANTS SINCE 1992
Through 2000

Network	Launch	Programming Expenses 1993	1994	1995	1996	1997	1998	1999	2000
		(million)							
Sci-Fi	Sep-92	$25.0	$35.0	$48.0	$47.7	$59.9	$65.9	$88.7	$102.6
Cartoon	Oct-92	3.0	6.0	8.0	18.0	31.1	33.3	49.9	57.4
ESPN2	Oct-93			40.8	72.9	89.0	124.6	143.3	157.6
Food	Nov-93			12.7	11.4	17.0	19.6	27.4	47.1
Fox Health	Dec-93			1.8	3.7	3.9	4.2	8.5	10.8
TCM	Apr-94				7.7	12.4	14.3	19.3	22.1
FX	Jun-94			100.0	115.0	102.1	107.2	123.3	140.3
MSNBC	Jul-94					83.7	87.9	92.3	106.1
Independent Film	Sep-94				9.1	12.0	14.4	11.6	14.5
HGTV	Dec-94			21.0	30.0	45.0	66.0	96.5	112.1
Game Show	Dec-94					6.2	4.6	10.1	13.0
History Channel	Jan-95				22.5	35.0	40.5	50.2	92.0
Golf Channel	Jan-95				30.4	36.0	41.1	27.3	31.0
ESPN Classic	May-95				6.4	14.1	17.6	22.0	27.5
Outdoor Life	Jul-95				18.0	32.0	36.8	37.9	43.6
CNNfn	Dec-95					21.5	22.6	24.2	27.8
Great American Country	Dec-95						2.8	4.1	4.5
BET on Jazz	Jan-96					3.0	3.9	5.1	6.6
Speedvision	Feb-96				18.0	31.5	36.2	48.8	53.7
TV Land	Apr-96					18.3	20.1	27.2	35.0
Animal Planet	Jun-96						33.8	57.4	62.7
MTV2	Aug-96							15.3	17.4
Fox News	Oct-96					54.0	64.8	77.8	93.3
ESPNews	Nov-96						15.8	19.7	24.6
CNN/SI	Dec-96						15.8	16.1	16.9
Toon Disney	Apr-98							9.0	9.0

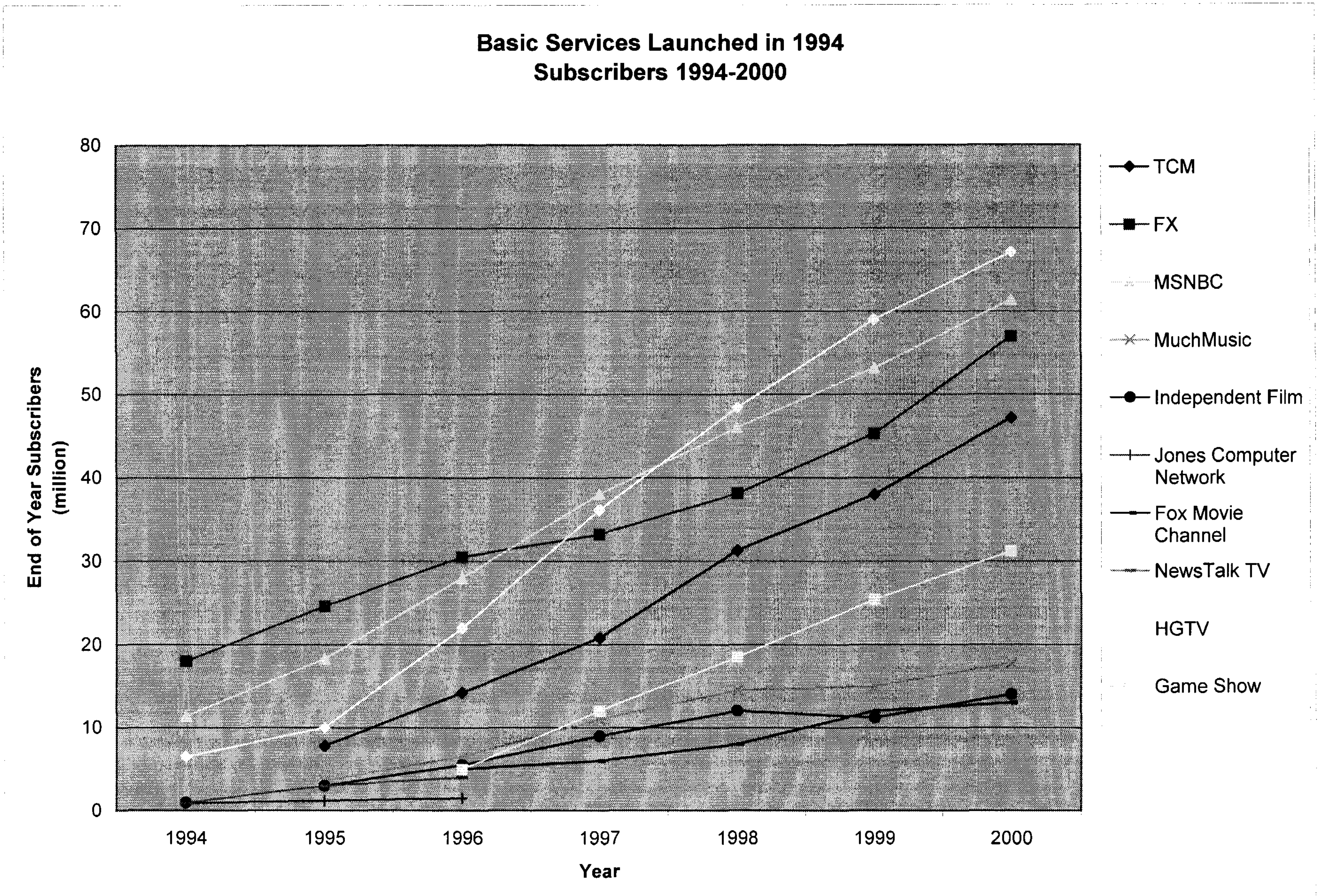
Network	Average Subscribers[1] 1993	1994	1995	1996	1997	1998	1999	2000
	(million)							
Sci-Fi	13.3	16.5	22.4	32.8	42.6	50.0	56.4	63.6
Cartoon	6.6	10.8	18.1	27.7	39.5	51.3	58.2	65.2
ESPN2			22.8	35.0	47.9	58.3	64.8	70.5
Food			12.6	17.2	24.5	33.5	40.7	49.4
Fox Health			3.5	6.8	8.0	8.2	12.9	19.6
TCM				11.0	17.5	26.1	34.7	42.6
FX			21.3	27.6	31.9	35.7	41.7	51.2
MSNBC					33.0	42.0	49.6	57.3
Independent Film				4.3	7.3	10.5	11.6	12.6
HGTV			8.3	16.0	29.1	42.3	53.7	63.1
Game Show					8.5	15.3	22.0	28.3
History Channel				19.8	36.8	49.4	58.2	65.7
Golf Channel				4.5	10.7	17.7	23.8	29.0
ESPN Classic				7.1	10.5	13.8	17.9	25.0
Outdoor Life				3.8	9.5	15.8	20.5	24.5
CNNfn					8.4	10.3	12.6	15.3
Great American Country						4.4	10.1	13.8
BET on Jazz					3.3	4.5	5.8	7.7
Speedvision					11.3	17.3	22.5	29.0
TV Land					20.1	29.5	40.4	49.7
Animal Planet						38.5	50.0	60.4
MTV2							10.9	16.5
Fox News					20.5	30.2	40.2	50.8
ESPNews						7.0	13.0	19.0
CNN/SI						12.7	15.1	15.8
Toon Disney							12.5	15.9

Network	Programming Expenses per Average Subscriber 1993	1994	1995	1996	1997	1998	1999	2000
Sci-Fi	$1.88	$2.12	$2.14	$1.45	$1.41	$1.32	$1.57	$1.61
Cartoon	0.46	0.56	0.44	0.65	0.79	0.65	0.86	0.88
ESPN2			1.79	2.08	1.86	2.14	2.21	2.24
Food			1.01	0.66	0.69	0.59	0.67	0.95
Fox Health			0.51	0.55	0.49	0.52	0.66	0.55
TCM				0.70	0.71	0.55	0.56	0.52
FX			4.69	4.17	3.21	3.01	2.96	2.74
MSNBC					2.54	2.09	1.86	1.85
Independent Film				2.14	1.66	1.37	1.00	1.15
HGTV			2.55	1.88	1.55	1.56	1.80	1.78
Game Show					0.73	0.30	0.46	0.46
History Channel				1.14	0.95	0.82	0.86	1.40
Golf Channel				6.83	3.36	2.32	1.15	1.07
ESPN Classic				0.90	1.35	1.28	1.23	1.10
Outdoor Life				4.80	3.37	2.34	1.85	1.78
CNNfn					2.56	2.20	1.92	1.82
Great American Country						0.64	0.41	0.33
BET on Jazz					0.92	0.87	0.89	0.86
Speedvision					2.80	2.10	2.17	1.85
TV Land					0.91	0.68	0.67	0.70
Animal Planet						0.88	1.15	1.04
MTV2							1.40	1.06
Fox News					2.63	2.15	1.94	1.84
ESPNews						2.26	1.52	1.29
CNN/SI						1.25	1.07	1.07
Toon Disney							0.72	0.57

[1] Average of year end subscribers and prior year end subscribers

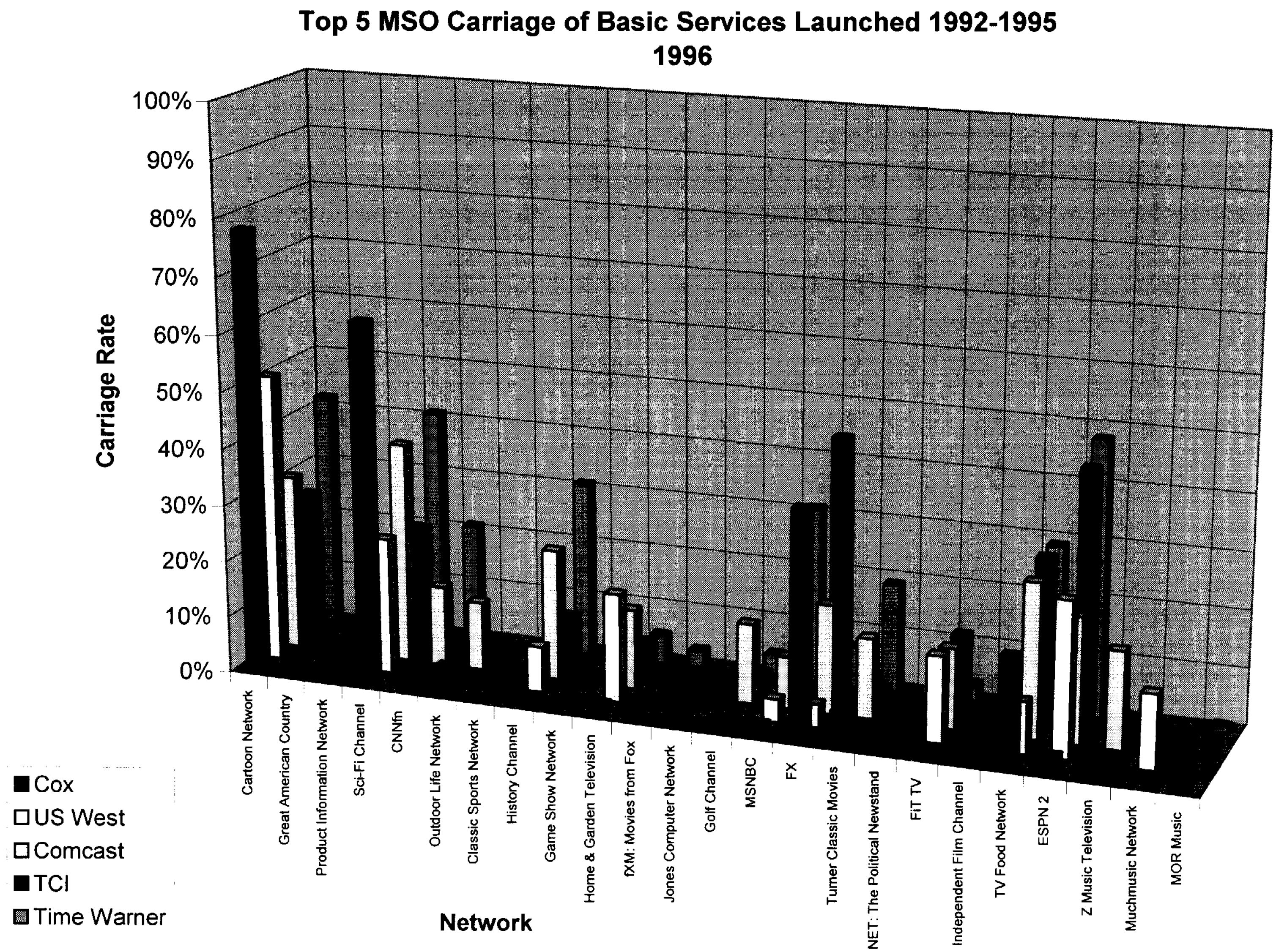
Note: Only includes networks with at least two years of data for both programming expenses and average subscribers.

Source: Programming Expenses: Paul Kagan Associates, Inc., *Cable TV Programing*, May 23, 1994, p. 3, July 31, 1995, p. 4 and September 30, 1996, p. 4 and *Cable Program Investor*, February 24, 1998, p. 4, April 13, 1999, p. 9, April 14, 2000, p. 4 and May 24, 2001, p. 5.
Launch & subscribers: Table 1.



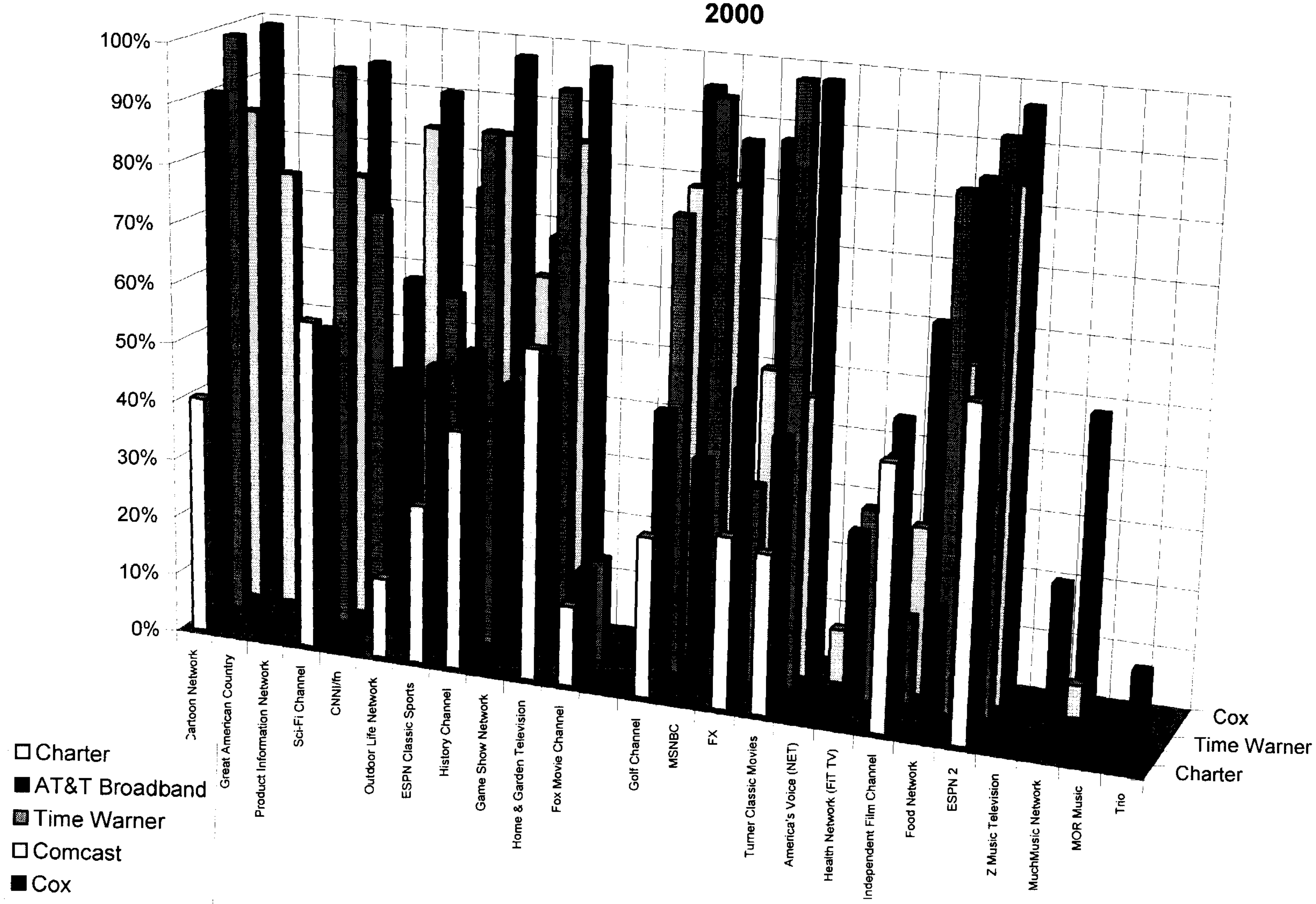
Source: Table 1

Graph 7A



Source: Warren Publishing and NCTA *Cable Television Developments*

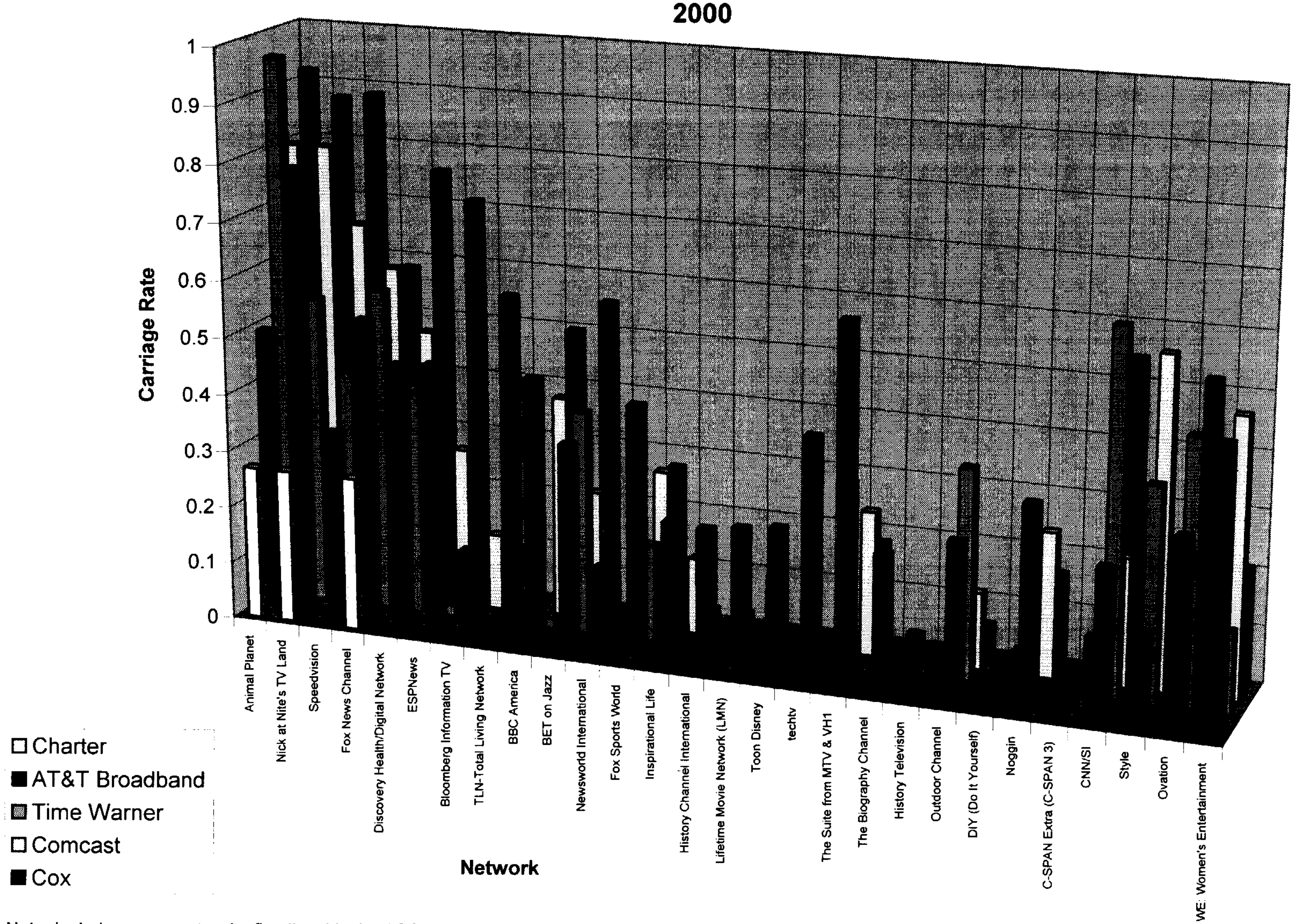
Top 5 MSO Carriage of Basic Services Launched 1992-1995 2000



Source: Warren Communications News and NCTA *Cable Television Developments*

Graph 7C

Top 5 MSO Carriage of Basic Services Launched 1996-1999
2000



Note: Includes some networks first listed in the FCC *Reports on the Status of Competition* in 1997-99 with 1993-95 reported start dates.

Source: Warren Communications News and NCTA *Cable Television Developments*

Signed:

Paul F Joskow

Paul L. Joskow

1/03/02

Date

Signed:

Linda McLaughlin
Linda McLaughlin

January 3, 2002
Date

CERTIFICATE OF SERVICE

I hereby certify that, on this 4th day of January 2002, copies of the Comments of Time Warner Cable were served upon the parties listed below by hand-delivery.

David M. Burke

Magalie Roman Salas *
Secretary
Federal Communications Commission
445 12th Street, S.W., Suite TW-A325
Washington, D.C. 20554
(original + 16 copies)

Qualex International *
445 12th Street, S.W., Room CT-B402
Washington, D.C. 20554
(1 copy)

Ava Holly Berland **
Cable Services Bureau
Federal Communications Commission
445 12th Street, S.W., Room 3-A832
Washington, D.C. 20554
(1 copy)

Linda Senecal **
Cable Services Bureau
Federal Communications Commission
445 12th Street, S.W., Room 3-A729
Washington, D.C. 20554
(5 copies)

* hand-delivered to:

Federal Communications Commission
236 Massachusetts Avenue, N.E.
Suite 110
Washington, D.C. 20002

** hand-delivered to:

Federal Communications Commission
9300 East Hampton Drive
Capitol Heights, Maryland 20743