MCI Communications Corp., 1983

In April 1983 Wayne English, chief financial officer of MCI Communications Corp., faced the problem of setting financial policy in an environment characterized by a large potential demand for external funding and great uncertainty concerning MCI's future. MCI, which provided long distance telecommunications services in competition with AT&T, had seen its revenues grow from almost nothing in FY1974 (ending March 31, 1974) to more than $1 billion in FY1983. During that period, the company climbed from a loss of $38.7 million in FY1975 to a profit of $170.8 million in FY1983. In those last two years alone, its stock price had increased more than fivefold.

Nevertheless, the antitrust settlement between AT&T and the U.S. Department of Justice in January 1982 had significantly altered the economic landscape for MCI. The settlement, providing for the breakup of AT&T by early 1984, would affect MCI in two important ways. On the one hand, it offered the opportunity for greatly increased growth, since AT&T would be required, for the first time, to compete on equal quality-of-service terms with MCI. On the other hand, the settlement posed new uncertainties, since it promised to eliminate certain MCI cost advantages and increase AT&T's competitive flexibility.

Even in the face of intensifying competition from AT&T, however, MCI was committed to extending the reach and capacity of its network. According to Brian Thompson, Harvard MBA 1964 and senior vice president for corporate development: "Economies of scale and scope are everything in this business. In the long term, the strategic high ground lies in owning your own facilities for basic call services and then leveraging off this to provide value-added services."

Company Background

MCI was organized under the leadership of William McGowan, a Harvard MBA 1954 graduate, as the Federal Communications Commission (FCC) appeared willing to allow increased competition with AT&T in the long distance market. In 1971 the FCC formally adopted a policy of allowing qualified new companies to enter the market for specialized long distance services, which consisted chiefly of *private line* (i.e., dedicated telephone line) services for large telephone users. By June 1972 MCI was ready to begin construction of its telecommunications network.

Assistant Professor Bruce Greenwald prepared this case as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

To provide the necessary funds, MCI sold 6 million shares of common stock to the public at $5 per share[1] (net proceeds after expenses and commissions were $27.1 million). MCI also obtained a $64 million line of credit from a group of four banks headed by the First National Bank of Chicago, and further loan promises of $6.45 million from private investors in the form of 7 1/2% subordinated notes (with attached warrants) of up to five-year maturities. The bank loans carried an interest rate of 3 3/4% above prime, plus a commitment fee of 1/2% per annum on the unborrowed balance.

In two years the MCI communications system grew to 2,280 route-miles of transmission circuits, linking 15 major metropolitan areas. Still, this was far short of the 11,600 route-mile system originally planned in 1972. MCI had to rely on AT&T facilities to carry calls from its subscribers to MCI transmission centers in each metropolitan area. Since AT&T had successfully resisted providing a full range of these interconnection services, MCI was unable to generate significant subscriber revenues. Late in 1973 MCI suspended all construction activity as it pursued legal and regulatory remedies. As part of this process, it filed an antitrust suit against AT&T in March 1974 (*Exhibit 1* presents this sequence of events schematically). The FCC ordered AT&T to provide MCI with the full range of interconnection facilities as of May 1974; MCI then resumed construction of its network.

In FY1975, MCI had revenues of $6.8 million, but losses of $38.7 million. By September 1975, despite a network consisting of 5,100 route-miles connecting 30 major metropolitan areas, MCI had a negative net worth of $27.5 million, an accumulated operating deficit of $87.3 million, and a stock market price just below $1 per share (see *Exhibit 2* for MCI's financial and operating history). MCI had exhausted its line of credit from the banks, had been forced to renegotiate the previous credit agreement to defer interest payments, and was in technical default of many provisions of the revised credit agreement. In the midst of this crisis, MCI managed a public sale of 9.6 million shares of common stock in December 1975, each share having an associated 5-year warrant with an exercise price of $1.25. The net proceeds of this offering, which amounted to $8.2 million (or about $0.85 per share-plus-warrant, compared with a then prevailing market price of $0.875 per share), enabled MCI to survive.

MCI reached a turning point in 1976. "Execunet" service, which had been introduced in the winter of 1974, began to yield substantial revenues and changed the nature of the company. Execunet provided a service comparable to standard long distance calling, with customers having random access to MCI's transmission lines. This enabled MCI to attract small business subscribers who could not afford the expense of dedicated private lines between particular cities (private line customers tended to be large corporations with large call volumes). Partly as a result, revenues increased to $28.4 million in FY1976 and $62.8 million in FY1977 (about half of which came from Execunet). Interest payments to the consortium of lending banks, which had been previously suspended, were resumed. Just as MCI made its first profit of $100,000 in September 1976, the FCC won a court order that restricted Execunet to existing subscribers; this order was not lifted completely until May 1978.

The order restricting Execunet slowed, but did not halt, MCI's progress. Revenue growth slowed to 18% between FY1977 and FY1978, but quickly returned to annual rates of more than 50% once the order was lifted. The number of employees tripled from 605 in March 1977 to 1,980 in March 1981; the plant grew from $136.6 million to $410.0 million over the same period. More important, MCI's profitability improved rapidly. After-tax earnings from continuing operations rose from a loss of $1.7 million for FY1977 to a profit of $21.1 million in FY1981 (see *Exhibit 2*). As a result, MCI had exhausted its tax loss carryforward by the end of FY1981, and stockholders' equity was a positive $148 million.

MCI's continuing record became extraordinary. In 1980 MCI offered Execunet service to residential customers (hitherto it had been available exclusively to businesses) on a trial basis in

[1]This and subsequent prices and numbers of shares have been adjusted for all stock splits on or before April 1, 1983.

Denver, Colorado. The results were so striking that within a week plans were made to offer Execunet to households nationwide. MCI's growth was constrained only by a lack of investment capital, which soon became available in substantial quantities (see *Exhibit 3*). Revenues more than doubled to $506 million in FY1982 and, with the acquisition of Western Union International from Xerox for $195.1 million in June 1982, revenues doubled again to $1,073 million in FY1983. Income from operations was $295.1 million, with net earnings of $170.8 million. A range of new products such as *MCI Mail* (an electronic mail service), and the results of AT&T's settlement with the Department of Justice offered dramatic opportunities for further growth. (1983 income statements and balance sheets for MCI are presented in *Exhibits 4* and *5*.)

Financial Policy

Until 1976 the need to obtain funds for continuing operations dominated MCI's financial policy. The court's 1976 order preventing the extension of Execunet service to new customers restricted opportunities for growth and consequently reduced the need for investment funds. At the same time, restrictive covenants associated with the bank loans from the syndicate headed by the First National Bank of Chicago severely limited MCI's ability to raise new capital for expansion. Between 1976 and the summer of 1978, lease financing of new fixed investment was the only substantial source of funds available. This went largely into expanding capacity in MCI's existing markets (see *Exhibit 3*).

Withdrawal of the court's Execunet order in May 1978 opened the way for accelerated growth if the required investment funds could be obtained. Wayne English, who had arrived as chief financial officer in February 1976, spent the summer of 1978 preparing to do this. First, he obtained agreement from the majority of the lending banks to a public offering of securities whose proceeds would retire their loans. Second, he arranged for the loans of those banks which refused this accommodation to be bought out by private investors. Finally, he bought up or converted a number of outstanding warrants and loans held by earlier investors. Consequently, in December 1978 MCI was able to enter the public capital markets for the first time since the equity issue of November 1975, with an offering of convertible preferred stock which raised $25.8 million—net of all issue expenses (see *Exhibit 6*). A second convertible preferred offering in September 1979 raised $63.1 million and a third in October 1980 netted $46.7 million.

The choice of convertible preferred stock was dictated on the one hand by the need for some form of equity capital, and on the other hand by the fact, as expressed by Wayne English, that "it was always our conviction that issuing more common would knock the props out from under the stock." As it was, the conversion price on the preferred stock rose with each offering, from $2.1875 in December 1978 to $5 in September 1979 to $9 in October 1980. In addition, the dividend on the preferred stock would be 85% tax deductible to corporate purchasers without costing MCI a significant loss of tax benefits, since MCI's earnings were still sheltered by the carryforward of past losses.

An additional feature of these preferred issues was a *call* provision that enabled MCI to force investors to convert to common stock, thus eliminating the drain of preferred dividends on cash flow. This provision typically specified that if the market price of MCI's common stock exceeded the conversion price by more than a stated margin (e.g., 25%) for 30 consecutive trading days, MCI could call the unconverted preferred shares in question for redemption at 110% of their issue value. Owners of preferred stock would, of course, voluntarily exchange their shares for common at the conversion price rather than allow them to be repurchased. A steadily rising stock price enabled MCI to use this mechanism to convert all three preferred issues to common stock by November 1981.

Proceeds from these preferred offerings allowed MCI to retire its short-to-intermediate term bank debt and to issue further debt of a longer-term kind. Leasing activity decreased and, in July 1980, MCI raised $50.5 million through the public sale of 20-year subordinated debentures.

In FY1981, as the demand for investment funds intensified, the direction of MCI's financial policy shifted slightly from offerings of convertible preferreds to convertible bonds. After obtaining $102.1 million in April 1981 in a straight subordinated debenture issue, MCI raised $98.2 million in August 1981 and $245.9 million in May 1982 with convertible debentures.

These convertible debentures carried forced conversion (i.e., *call*) provisions similar to those of the earlier preferred stock issues. As a result, MCI was able to force conversion of the May 1982 issue in December 1982 and of the August 1981 issue in February 1983. The consequent additions to common equity enabled MCI to take on a still greater debt burden. Thus, a straight debenture issue in September 1982 yielded $209.9 million and a further convertible debenture in March 1983 produced almost $400 million.

In all, MCI raised about $1,050 million from the public sale of securities in FY1982 and FY1983. As with all MCI offerings, the initial issues were oversubscribed. Interest costs were relatively high (see *Exhibit 7*), but in the words of Wayne English, "Availability of funds [was] the paramount consideration"; cost was "secondary." Moreover, since profitability was increasing more rapidly than interest expense, interest coverage actually increased during this time. Considering the situation in 1975, and in comparison to other companies (see *Exhibit 8*), this was a remarkable achievement.

However, as details of the FCC's response to the AT&T antitrust settlement began to emerge, the resulting uncertainty cast doubt on MCI's continued ability to raise funds in these quantities. MCI would have to proceed with care, agility, and imagination.

The AT&T Antitrust Settlement and Other Developments

Historically, AT&T provided a necessary part of the MCI system—and its most serious competition. One part of AT&T—the local telephone operating companies (e.g., Illinois Bell, New England Telephone)—supplied MCI with connections to subscribers through their local telephone networks. MCI paid for these services at a rate negotiated in 1978, under the FCC's supervision, between MCI and the local telephone companies (predominantly AT&T subsidiaries). This charge was about $230 per month per access line, or $172.7 million a year by 1983. MCI also used AT&T and other long distance facilities to enable its customers to reach areas not already served by the MCI network. In FY1983, MCI paid $137.2 million for these services, at the standard commercial rate.

MCI's principal competitor in the market for interstate long distance services was AT&T's Long Lines division, with about 95% of the market. AT&T Long Lines also reimbursed local operating companies for access lines, but at a rate about three times that charged MCI and the other competing carriers, such as GTE Sprint Service and ITT. This discrepancy was justified by the fact that MCI customers usually had to dial 20 digits to reach a long distance number, compared with 11 digits (1, plus area code, plus 7-digit number) for an AT&T customer. Thus, AT&T Long Lines was expected to pay more for "superior access."

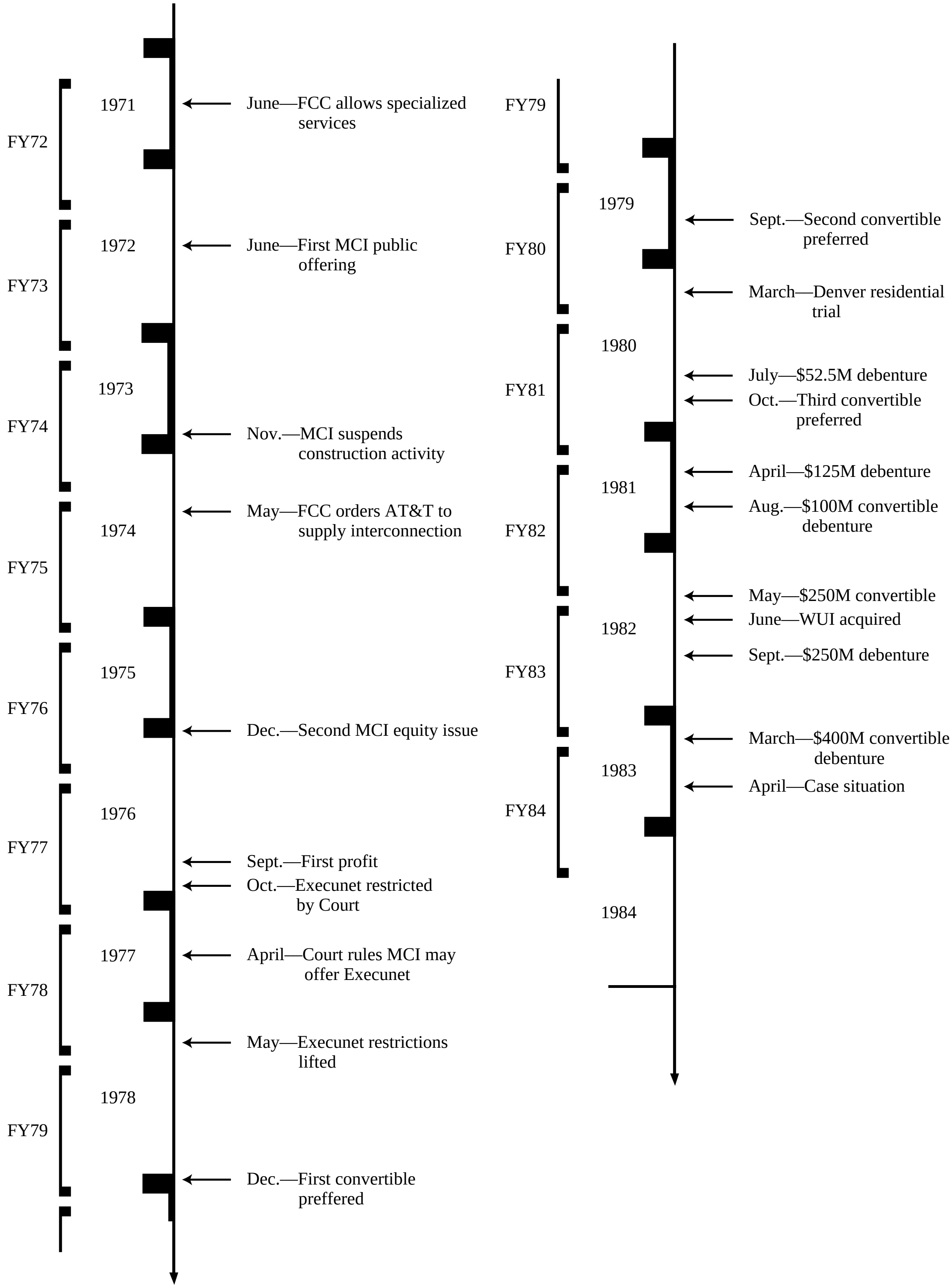
The settlement of the antitrust suit between AT&T and the Justice Department in January 1982 separated AT&T from its local operating subsidiaries. AT&T retained the Long Lines division and the intrastate long distance facilities of the local companies. After separation occurred in January 1984, the long distance operations would be consolidated in a new AT&T subsidiary named AT&T Communications. AT&T Communications would eventually compete on a more or less equal basis with MCI and the other long distance companies (GTE, ITT, and so on). To ensure this result, the settlement required that by 1986 the newly independent local telephone companies provide *equal* quality of *access* to all competing long distance providers. An FCC plan would phase out the differential in access charges between AT&T and its competitors by increasing the fees paid by MCI and others. Although equal access would be phased in over two to three years, the FCC plan in its original form called for an initial increase of about 80% in MCI access charges in 1984. Thus, on the one hand, MCI would eventually gain by acquiring equal access but, on the other hand, would immediately lose much of its existing cost advantage over AT&T.

The value of equal access to MCI was difficult to measure precisely. Some customers already enjoyed effectively equal access, since electronic switchboards had features that would automatically route calls via MCI lines whenever the usual 10- or 11-digit long distance number was dialed. However, these tended to be large business customers who made up only a small fraction of MCI's revenue. A trial of equal access in part of Iowa led to an almost immediate increase in MCI's share of the long distance market, from less than 5% to about 20%. In this case, however, competition from MCI's non-AT&T competitors was not severe, and AT&T still paid more in access fees.

The impact of equalized access charges on market share was also difficult to judge. Under the FCC plan, AT&T's access pricing flexibility was expected to increase as deregulation of the long distance market—the FCC's ultimate goal—proceeded. In principle, therefore, AT&T would be able to reduce its prices to prevent further erosion of its market share. In practice, however, it would make little economic sense for AT&T, with 95% of the market, to cut prices for the sake of preventing anything less than massive losses of market share to MCI and its other competitors. The outcome would depend on the direction taken by AT&T's management, which had been surprisingly aggressive in the past.

In the face of these uncertainties, it was difficult to predict MCI's growth in revenue and earnings in FY1984 and beyond. Forecasting the need for fixed and working capital was equally difficult; however, a consensus forecast is presented in *Exhibit 9A* (based on the assumptions described in *Exhibit 9B*). Against these contingencies, MCI held about $550 million in cash in the spring of 1983. Its stock price stood at $47, and long-term interest rates had just declined dramatically.

Exhibit 1 Chronology of Significant Events



Note: FY ends March 31.

Exhibit 2 MCI Operating History ($ millions except per share data)

	FY1974	FY1975	FY1976	FY1977	FY1978	FY1979	FY1980	FY1981	FY1982	FY1983
Revenue	$0.7	$6.8	$28.4	$62.8	$74.0	$95.2	$144.3	$234.2	$506.4	$1,073.2
Operating income	(15.0)	(17.3)	(10.6)	17.7	25.0	30.6	37.2	51.3	167.0	295.1
Net interest	3.8	11.6	15.5	18.4	20.5	23.1	24.1	27.4	35.1	54.1
Net after-tax earnings	(20.1)	(38.7)	(27.2)	(1.7)	5.2	7.1	13.3	21.1	86.5	170.8
Cash, cash equivalents	1.2	1.4	3.7	2.8	4.3	10.3	7.9	12.7	144.8	542.0
Working capital[a]	0.3	(7.4)	(12.7)	(18.3)	(21.7)	(26.9)	(34.1)	(24.8)	42.5	391.8
Plant, equipment	60.0	81.0	120.8	126.6	148.9	188.9	282.0	410.0	619.5	1,324.2
Total assets	71.8	90.1	131.2	147.7	161.2	209.5	309.8	466.9	860.4	2,070.5
Short-term debt[b]	1.2	4.0	9.8	17.0	20.2	25.8	31.6	39.9	40.3	48.0
Long-term debt	48.4	95.2	144.3	149.7	152.8	153.3	172.9	242.7	400.0	895.9
Stockholders' equity	19.1	(14.4)	(29.1)	(32.2)	(22.7)	11.5	78.8	148.0	240.8	765.6
Shares outstanding[c]	27	30.6	41	40.2	40.6	43.4	65.8	75.6	97.4	117.2
Earnings per share[d]	(0.74)	(1.42)	(0.81)	(0.06)	0.05	0.04	(0.01)	0.09	0.91	1.69
Price range—common stock	1½–4½	½–2½	½–2½	1–2	1–2½	1½–3½	2–4½	2½–7	7–18	16–47

Source: MCI Annual Reports, 10Ks and prospectuses.
Note: ( ) denotes negative figure.
[a]Current assets less current liabilities (current assets include cash, cash equivalents).
[b]Includes long-term debt payable within one year.
[c]At year end. MCI has never paid any dividend on its common stock.
[d]Earnings per common share after preferred dividends, before extraordinary items.

Exhibit 3 Sources and Uses of Funds ($ millions)

	FY1978	FY1979	FY1980	FY1981	FY1982	FY1983
A. Funds from Operations						
Retained earnings[a]	$ 2.5	$ 1.6	$ (1.1)	$ 7.2	$ 83.1	$ 170.8
Depreciation	11.2	13.6	18.3	27.2	60.8	108.6
Other[b]	2.7	3.5	7.0	6.1	35.2	57.1
Total	16.4	18.7	24.2	40.5	179.1	336.5
B. External Financing						
Net increase in lease obligations	10.2	35.0	65.4	47.7	(32.2)	(18.3)
Other net borrowing, sale of securities	(4.6)	(0.8)	19.3	85.1	193.3	842.2
Total	5.6	34.2	84.7	132.8	160.1	823.9
Total sources	22.0	52.9	108.9	173.3	339.2	1160.4
C. Uses of Funds						
Investment in plant, equipment	22.2	52.5	110.3	155.7	271.5	623.0
Acquisitions	—	—	—	—	—	195.1
Increase in adjusted working capital[c]	(1.7)	(5.6)	1.0	12.8	(64.1)	(55.2)
Change in cash holdings	1.5	6.0	(2.4)	4.8	131.8	397.5
Total uses	22.0	52.9	108.9	173.3	339.2	1160.4

Source: MCI Annual Reports, 10Ks.
Note: ( ) denotes decrease. Numbers may not add exactly, due to rounding.
a. Net income less preferred dividends.
b. Deferred taxes, employee stock purchase plan.
c. Working capital excluding cash and short-term debt.
d. Not including working capital of WUI.

Exhibit 4 MCI Income Statements ($ millions)

	1981	*1982*	*1983*
Revenue	$234	$506	$1,073
Operating expense (excluding depreciation)	157	283	674
Depreciation	26	56	104
Operating income	51	167	295
Interest expense	28	54	75
Interest income (less other expense)	1	16	21
Profit before tax	24	129	241
Provision for income taxes	5	43	70
Net income	19	86	171
Extraordinary item	2	0	0
Adjusted net income	21	86	171
Preferred dividends	11	3	0
Income available for common stock	10	83	171

Exhibit 5 MCI Balance Sheets ($ millions)

	FY1981	*FY1982*	*FY1983*
Cash and cash equivalents	13	144	542
Accounts receivable	32	79	162
Other	49	5	9
Current assets	49	228	713
Plant, equipment (net)	410	619	1,324
Other	8	13	33
Total assets	467	860	2,070
Accounts payable, accrued liabilities	34	137	251
Accrued taxes	0	8	22
Debt due within one year	40	40	48
Current liabilities	74	185	321
Long-term debt	243	400	896
Deferred income taxes	2	34	88
Total liabilities	319	619	1,305
Preferred stock (par value)	1	0	0
Common stock (par value)	4	5	12
Surplus capital paid in	220	230	576
Retained earnings (deficit)	(77)	6	177
Total liabilities, net worth	467	860	2,070

Exhibit 6 Public Sales of Securities by MCI

Date	*Instrument*	*MCI Price on Issue Date*	*Amount/Price*	*Net Proceeds*	*Date Called for Conversion*
June 1972	Common stock	IPO	6,000,000 shares @ $5	$ 27,070,000	na
Nov. 1975	Common stock plus 5-year warrant attached (exercise price—$1.25)	7/8	9,600,000 units @ $1	$ 8,165,000	na
Dec. 1978	$2.64 Convertible cumulative preferred stock (conversion price—$2.1875 per share of common)	1 7/8	1,120,000 shares @ $25	$25,760,000	March 1980
Sept. 1979	$1.80 Senior convertible cumulative preferred stock (conversion price—$5 per share of common)	3 1/4	4,500,000 shares @$15	$63,125,000	May 1981
July 1980	15% Subordinated debentures due August 1, 2000	—	$52,500,000 @ 100% of face value	$50,545,000	na
Oct. 1980	$1.84 Cumulative convertible preferred stock (conversion price—$9 per share of common)	6 1/16	3,300,000 shares @ $15	$ 46,725,000	Nov. 1981
April 1981	14 1/8 % Subordinated debenture due April 1, 2001	—	$125,000,000 @ 84.71% of face value	$102,055,000	na
Aug. 1981	10 1/4 % Convertible subordinated debenture due August 15, 2001 (conversion price—$12.825 per share of common)	10 7/8	$100,000,000 @ 100% of face value	$98,200,000	Feb. 1983
May 1982	10% Convertible subordinated debenture due May 15, 2002 (conversion price—$22.50 per share of common)	18 5/8	$250,000,000 @ 100% of face value	$245,925,000	Dec. 1982
Sept. 1982	12 7/8 % Subordinated debenture due Oct. 1, 2002	—	$250,000,000 @ 85.625% of face value	$209,922,500	na
March 1983	7 3/4 % Convertible subordinated debenture due March 15, 2003 (conversion price—$52.125 per share)	43 3/8	$400,000,000 @ 100%	393,675,000	—

Source: MCI prospectuses.

Note: All prices and share figures adjusted for subsequent stock split. Amounts are initial offering levels. In each case, the offerings were oversubscribed and additional funds were raised.

Exhibit 7 Comparative Interest Rates

	Industrials				Utilities			
	Bonds[a]		Preferred Stock[b]		Bonds[a]		Preferred Stock[b]	MCI[c] Bonds
Issue Date	A	BBB	Medium	Speculative	A	BBB	Medium	
Dec. 1978	9.17%	9.76%	9.45%	10.34%	9.50%	9.78%	10.48%	PS 10.56%
Sept. 1979	9.74	10.41	9.76	11.53	10.05	10.51	10.97	PS 12.00
July 1980	11.35	11.74	10.56	10.91	11.54	12.60	12.32	D 15.00
Oct. 1980	12.92	13.03	11.43	11.98	12.79	14.14	14.32	PS 12.27
April 1981	13.29	14.18	13.19	13.65	14.01	15.17	15.12	D 16.80
August 1981	16.25	17.25	13.46	14.99	17.50	18.00	15.85	CD 10.25
May 1982	15.50	16.50	13.16	14.62	16.25	17.00	14.93	CD 10.00
Sept. 1982	13.75	14.63	13.21	14.49	14.00	15.13	14.11	D 15.17
March 1983	12.50	13.00	11.36	12.67	12.75	13.25	12.51	CD 7.75

Note: PS = Convertible preferred stock; D = Straight debenture; CD = Convertible debenture.
[a]S&P rating.
[b]Rates are for nonconvertible preferred stock.
[c]MCI bonds are nonrated for most of this period.

Exhibit 8 Comparison Companies, 1983 ($ billions)

	MCI	AT&T	GTE	IBM	ITT
Revenue	$1.1	65.1	12.1	34.4	16.0
Net income	$0.17	6.99	0.90	4.41	0.70
Assets	$2.1	148.2	21.9	32.5	14.1
Returns on					
Sales	15.9%	10.7	7.4	12.8	4.4
Assets	11.0%	8.6	4.1	14.1	4.8
Equity	32.4%	12.2	15.6	22.9	12.7
Pay-out ratio	0%	67	61	47	54
Debt ratio[a]	55%	43	57	14	38
Current ratio	2.2	0.9	1.0	1.6	1.3
Interest coverage	4.2X	3.6X	2.4X	18X	2.5X
Bond rating	NR	AAA	BAA	AAA	A
Price earnings ratio (range)	8–27	6–8	6–10	8–13	5–7

Source: Standard and Poor's Reports; Moody's.
[a]Total debt to capital.

Exhibit 9A Baseline Forecast of Anticipated MCI Operating Characteristics ($ millions)

		FY1983	*FY1984*	*FY1985*	*FY1986*	*FY1987*	*FY1988*	*FY1989*	*FY1990*
(1)	Interstate long distance market	$27,000	$29,800	$32,800	$36,000	$39,700	$43,600	$48,000	$52,800
(2)	MCI market share[a]	4.0%	6.2%	9.6%	13.5%	18.6%	19.8%	20.0%	20.0%
(3)	MCI revenue [(1) x (2)]	$1,073	$1,850	$3,160	$4,870	$7,380	$8,660	$9,600	$10,560
(4)	Access charges (% of sales)	16%	23%	29.5%	29.5%	29.5%	28.5%	27.5%	26.5%
(5)	Operating margin[b]	27.5%	20.5%	12.0%	12.0%	12.0%	13.0%	14.0%	15.0%
(6)	Operating earnings (EBIT) [(3) x (5)]	$295	$380	$390	$590	$890	$1,125	$1,345	$1,580
(7)	Interest paid	$75	$100	$100	$100	$100	$100	$100	$100
(8)	Other income	$21	$13	$3	$4	$4	$5	$5	$5
(9)	Provision for taxes	$70	$83	$58	$123	$206	$299	$400	$475
(10)	After-tax net income [(6) – (7) + (8) – (9)]	$171	$210	$235	$371	$588	$731	$850	$1,010
(11)	Increase in deferred taxes	$53	$65	$88	$106	$120	$140	$146	$140
(12)	Incremental investment factor	1.15	1.15	1.12	1.10	1.08	1.06	1.04	1.0
(13)	Capital expenditures for new capacity [Change in (3) x (12)]	$623	$890	$1,467	$1,881	$2,710	$1,357	$980	$960
(14)	Capital expenditures for replacement	—	—	—	$50	$50	$100	$100	$100
(15)	Total capital expenditures [(13) + (14)	$623	$890	$1,467	$1,931	$2,760	$1,457	$1,080	$1,060
(16)	Depreciation	$104	$173	$272	$412	$601	$749	$800	$826
(17)	Net plant, equipment (end of year)	$1,324	$2,041	$3,236	$4,755	$6,914	$7,622	$7,902	$8,136
(18)	Additional working capital required	0	0	0	0	0	0	0	0

Source: Casewriter's estimates based on security analysts' forecasts.

[a]This is total MCI revenue as a fraction of long distance revenue and includes non-long-distance revenues. MCI's actual share of the interstate long distance market would be slightly lower.

[b]Includes depreciation as a cost.

Exhibit 9B Assumptions Underlying the Forecasts of Exhibit 9A

1. The interstate long distance market, which amounted to about $27 billion in FY1983, would grow at 10% per year through FY1990.

2. MCI's revenue would increase from 4% of total long distance revenue in FY1983 to 20% in FY1990. The increase would be rapid in the years immediately following the advent of *equal access*, but would subsequently slow down as AT&T began to defend its reduced share of the market, other competitors developed their networks, and the market itself adapted to the shock of competition. This pattern is shown on line (2) of *Exhibit 9A.* In each year, 10% of MCI revenues would come from other than long distance growth. Thus, in FY1990 MCI was projected to hold 18% of the long distance market. MCI's management was believed to be committed to a growth program of the dimensions shown on line (3) and would, if necessary, sacrifice profit margins to achieve it.

3. Access charges paid by MCI would almost double between FY1983 and FY1985. They would then taper off to about 26.5% of total revenue in FY1990. This was consistent with announced FCC intentions at the end of March 1983. However, there was a great deal of uncertainty in this area. AT&T currently paid access charges amounting to more than 50% of revenue, and reductions to the levels on line (4) would depend on the imposition of *direct access* charges on households and businesses. Legislation in Congress with a reasonable chance of passage forbade the imposition of such direct access charges.

4. MCI's operating margin (operating earnings as a fraction of revenue) would shrink under the dual pressure of higher access charges and increased competition from both AT&T and other long distance suppliers. Ultimately, however, as access charges fell and the market stabilized, margins were expected to recover to a level of about 15%. Anticipated yearly margins are shown on line (5). However, as noted above, these were subject to substantial uncertainty. In the best case, favorable regulatory and legislative action, coupled with restrained competitor behavior, might increase margins by as much as 7% (up to 22% of sales) from these levels. In an unfavorable situation, severe competition and high access charges could reduce margins by an equal amount.

5. Interest payments on MCI's outstanding debt were running at an annual rate of about $100 million at the end of FY1983 (for the year as a whole, interest payments were only $75 million because the debt level increased during the year) and, with no net change in indebtedness, would remain stable at this level through FY1990.

6. Other income, shown on line (8), represents interest in holdings of cash equivalents. As *excess* cash is used up, this figure is expected to decline to $3 million and then grow roughly with sales. This projection does not include interest on the proceeds of any future security offerings that are added temporarily to cash.

7. Provision for taxes, shown on line (9), amounts in 1984 to 25% of net income, which is below the 46% base rate because of investment tax credits and other special credits. As growth and investment slow in later years and reduce the available credits, taxes as a percentage of net income should increase.

8. Increases in deferred taxes, shown on line (11), accumulate at a rate related to present and past capital expenditures. As growth slows so does the rate of accumulation of deferred tax credits.

(continued on next page)

Exhibit 9B (continued)

9. In March 1983 each extra dollar of revenue required about $1.15 worth of investment in fixed plant and equipment. This factor was expected to fall to about $1.00 by FY1990, as improved electronic technology reduced equipment costs. The expected yearly pattern is shown on line (12). It was possible, however, that in the latter part of the period (post-FY1987) this factor would fall substantially below $1.00.

10. Replacement of older equipment would require the investments described on line (13).

11. Depreciation would be charged at an annual rate equal to 9.8% of the value of plant and equipment in place at the beginning of each year plus 4.9% of the value of total new investment.

12. No additions to working capital would be required throughout the period and any cash on hand at the end of FY1983 could be devoted to investment programs.

13. MCI would not penetrate intrastate toll market.