

# BUSINESS ETHICS PROGRAM

## The Unicom, Inc. Case

### Finance

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Arthur Andersen & Co, SC has sponsored and funded this project to promote discussion and awareness of ethical issues arising in the business world. Arthur Andersen & Co, SC takes no positions and expresses no views with respect to the myriad of ethical issues reflected in this case but hopes that users will facilitate and promote a dialogue on these important issues.

## **UNICOMP, INC.**

### **SITUATION I (LATE 1985)**

John Lungren wasn't sure what to do. Three years ago, fresh out of his MBA program with a strong background in finance and accounting, John had been hired to work in Unicom's financial department at an unusually high salary. He quickly displayed his financial and communication talents and by the end of his second year had been made Special Assistant to the Vice-President of Finance, Tom Krill. John had married, acquired a home with a sizable mortgage, and he and his wife were expecting their first child. Given his promising future at Unicom, being deeply in debt hardly mattered.

Now Krill and Unicom's President and CEO, Frank Percy, had asked him to prepare a report justifying the acquisition of Comptech, a small company that manufactured IBM-compatible microcomputers. Normally John would have welcomed the assignment, but this one made him uneasy.

#### *Unicom's Status*

Unicom was incorporated in 1978 in Santa Clara, California, part of the Silicon Valley. Its President, Frank Percy, is a former engineer. Unicom has revenues of about \$50 million. (See Appendix for Unicom's financial statements and balance sheets.)

Unicom began by producing and marketing hard disk drives for microcomputers. In 1980, the company introduced "local area networking" (LAN) which allows several dozen personal computers to exchange information using the same storage device, printer, modem, and other peripherals. By 1981 the company's LAN system was a successful product.

Unicom operated in a very competitive environment, however. Larger, better known companies were marketing their own LAN systems, storage devices and microcomputers. To succeed Unicom offered lower prices and quicker delivery than many of its rivals.

In 1982 the company introduced a microcomputer with its own operating system to serve as a workstation in its LAN system. This was seen as a key strategic step, since revenues from a system including microcomputers were much higher than revenues from a system without.

Unfortunately, Unicom's new microcomputer failed. There just wasn't enough compatible software. Businesses tended to buy IBM microcomputers (for which an array of software existed) and connected them using Unicom's LAN. Other computer companies found they could succeed only by making IBM clones—inexpensive PC's that could use software developed for IBM. By building a non-IBM-compatible computer, Unicom had locked itself out of this market. Although sales of its LAN remained high, customers ignored Unicom's personal computers.

During 1984, Unicom's sales slumped due to stiffer competition and even slower sales of its microcomputers. Sales of its LAN systems, however, increased by about 70 percent, accounting for 23 percent of net sales (as compared to 14 percent for 1983). Cost of sales increased over 1983, because larger inventory reserves were set aside due to a buildup of the company's non-IBM-compatible microcomputer inventory. Although losses at the end of fiscal '84 totaled \$10,770,000, considerable belt tightening followed and matters improved the following year. By

the end of fiscal '85, the company posted losses of \$2,707,000. Still it was clear that something more had to happen. One idea was to make an IBM-compatible micro that could be sold as a workstation along with the company's LAN system.

In spite of Unicom's problems, John Lungren liked working there. He was paid extremely well for his ability to explain financial concepts. This was a crucial service, since the company was composed largely of engineers. John knew he could never find a comparable position with another corporation and still live in the style to which he and his wife had become accustomed. He enjoyed being able to come to work in blue jeans and address co-workers by their first names. It was an egalitarianism, "hang-loose" organization. Every Friday afternoon they had a TGIF beer and pizza bash.

The only thing that bothered John was the chaos that often reigned within the company. Sometimes it was hard to know who was in charge of a project. Although things always got done, they were often several months late—sometimes a year. Percy and the vice-presidents seemed to view the chaos as the "creative ferment" that kept people bubbling with new ideas.

### *Unicom's Financial History*

Originally financed with venture capital from several investment firms, the company's first years appeared wildly successful. In just a year the founders produced storage devices; at the end of two years the company went public and began selling its stock over the counter. Initially offered for \$3 a share in 1982, the stock within days sold for \$12 a share. This offering gave the company \$10,000,000. A second public offering, in September 1982, netted almost \$24,000,000. Since then, the firm's stock has fluctuated, depending on the boom-and-bust cycles of the computer industry. (See Appendix for Unicom's financial sheets and the "historical risk premiums" of small stock companies.) At times the stock has traded for as much as \$21 a share and as little as \$2. By late 1985 it was holding steady at \$3.50. The company had never paid cash dividends and planned to continue reinvesting all earnings in the business.

The investment firms that provided Unicom's start-up capital sold off most of their shares when the stock was at \$20. The original founders, who held substantial blocks of shares in the company, also sold much of their stock. Eventually all of them left the firm, either to retire and enjoy their wealth or to start up other ventures with their stock proceeds. A headhunter found Frank Percy. He was hired as President and CEO when Unicom's founder left. Percy had been working at another Silicon Valley computer company, and when he came to Unicom he bought several people, including Tom Krill and two other vice presidents.

The Board of Directors now consisted of Percy, Krill, and a representative of an investment firm that owned 5 percent of Unicom's stock. Between them, Percy and Krill held 1 percent of Unicom's stock. The rest of the stock was distributed among several thousand shareholders, none of whom held large blocks.

### *The Assignment*

About this time (late 1985), Percy and Krill approached John with a special task. John went to Percy's office to discuss the assignment. As he entered, Krill greeted him and said, "Have a seat, John. We'd like to update you on some important news. We just met with the other vice presidents, and we've agreed to purchase Comptech."

John knew that Comptech manufactured small IBM-compatible microcomputers and that it started selling products about two years ago. Much of Comptech's stock was owned by Sam Beuhler, the President of Comptech, and his family. Some of Unicom's vice-presidents had helped Beuhler set up his company and probably owned shares of Comptech. John suspected Percy and Krill owned sizable blocks of Comptech stock, which was not publicly traded.

"Isn't Comptech a little young?" asked John.

"We've been trying to find a quick way to make our computer systems compatible," explained Krill. "Now we've got the perfect opportunity—Comptech. We spoke with the President, Sam Beuhler, and the Board of Directors. They agreed to sell and we're going to offer them 3.7 million shares of our stock. We'd like you to look over the company and give us an analysis of the purchase. We've talked this over with our Board. Percy and I think it's a good buy, but the guy from the investment firm doesn't. We could just outvote him, but we want you to write up a purchase analysis that shows him this makes good business sense."

"I don't know," said John. "I've heard rumors Comptech isn't doing so great. I know it sustained losses last year. Some people I've talked with think it's because the way the company's managed."

"Look, John," Percy said softly, "Krill and I KNOW Beuhler and his company. We think it's an excellent company. Like most start-ups, Comptech has been kind of slow reaching a favorable profit picture. That just makes it easier for us to buy them out. Especially since future prospects for their IBM clone are so good. Comptech gave us projections. We're convinced this will work for us. It's an easy way to get the IBM compatibles we need for our LANs."

Krill continued. "We've looked over Comptech's books. We're getting the company for a good price, considering the added value of the synergism that will result. Their microcomputers will help us sell more LANs, our LANs will help them sell more microcomputers. We could offer them chicken feed. But that wouldn't be ethical, would it?" Krill's tone changed and acquired a barely noticeable edge. "John, this purchase is very important to all of us who have helped Beuhler set up his company. That report had better be good. Nobody wants a negative report on something so important to everyone here, you know?"

Later, when John made some inquiries, he found that Sam Beuhler was a close friend of Percy, Krill and some of the other vice presidents at Unicom. In fact, Beuhler, Percy and two Unicom vice-presidents had all worked together at another Silicon Valley firm some years ago.

When John looked over Comptech's financial statements (see Appendix) and calculated its value, he became nervous. He wasn't sure what to do.

APPENDICES SITUATION I

UNICOMP, INC.  
FINANCIAL STATEMENTS

A.1 INCOME STATEMENTS

	4-YR AVG	May-85	May-84	May-83	May-82	May-81
Net Sales	44,568	53,223	50,540	47,673	26,838	10,325
Cost of Sales	<u>28,278</u>	<u>32,900</u>	<u>35,909</u>	<u>27,512</u>	<u>16,792</u>	<u>6,628</u>
Gross Profit	<u>16,290</u>	<u>20,323</u>	<u>14,631</u>	<u>20,161</u>	<u>10,046</u>	<u>3,697</u>
Operating expenses						
Product development	3,988	5,664	5,605	2,915	1,769	385
Marketing, administrative And general	13,001	15,803	21,279	10,617	4,303	1,820
Pension contributions	138	173	147	125	106	91
Depreciation and Amortization	<u>1,794</u>	<u>3,049</u>	<u>3,116</u>	<u>791</u>	<u>220</u>	<u>83</u>
	<u>18,921</u>	<u>24,689</u>	<u>30,147</u>	<u>14,448</u>	<u>6,398</u>	<u>2,379</u>
Net operating income (loss)	(2,631)	(4,366)	(15,516)	5,713	3,648	1,318
Nonoperating (interest) Income	<u>844</u>	<u>606</u>	<u>717</u>	<u>1,643</u>	<u>410</u>	<u>0</u>
Earnings before interest and taxes	(1,787)	(3,760)	(14,799)	7,356	4,058	1,318
Interest expense	<u>75</u>	<u>192</u>	<u>89</u>	<u>14</u>	<u>6</u>	<u>64</u>
Income before taxes	(1,862)	(3,952)	(14,888)	7,342	4,052	1,254
Income tax expense (benefit)	<u>(160)</u>	<u>(1,245)</u>	<u>(4,118)</u>	<u>2,999</u>	<u>1,725</u>	<u>639</u>
Net income	(1,702)	(2,707)	(10,770)	4,343	2,327	615
Common stock dividends	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Retained earnings	<u>(1,702)</u>	<u>(2,707)</u>	<u>(10,770)</u>	<u>4,343</u>	<u>2,327</u>	<u>615</u>
Fully diluted common stock shares	9,403	9,939	9,906	9,793	7,974	4,323

UNICOMP, INC. A.2 BALANCE SHEETS

	4-YR AVG	May-85	May-84	May-83	May-82	May-81
Cash and marketable securities	7,066	11,635	2,507	12,711	1,414	304
Accounts receivable	7,873	6,702	7,293	10,812	6,686	2,578
Inventories	12,977	9,680	17,342	16,827	8,059	1,967
Prepaid expenses	720	730	1,223	618	309	116
Refundable income taxes	<u>1,240</u>	<u>1,000</u>	<u>3,961</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total current assets	29,876	29,747	32,323	40,968	16,468	4,965
Net property, plant and equipment	6,440	6,992	8,435	7,013	3,318	1,257
Deferred pension benefits	462	579	493	420	357	304
Other assets	<u>304</u>	<u>251</u>	<u>22</u>	<u>599</u>	<u>343</u>	<u>1</u>
Total assets	<u>37,082</u>	<u>37,569</u>	<u>41,273</u>	<u>49,000</u>	<u>20,486</u>	<u>6,527</u>
Short-term debt	0	0	0	0	0	650
Accounts payable	4,753	4,047	4,974	4,379	5,611	3,743
Accrued lease termination cost	375	750	750	0	0	0
Accrued compensation and benefits	864	891	1,138	1,008	418	168
Accrued income taxes	201	0	0	359	445	642
Other accrued liabilities	<u>169</u>	<u>391</u>	<u>186</u>	<u>30</u>	<u>72</u>	<u>72</u>
Total current liabilities	<u>6,362</u>	<u>6,079</u>	<u>7,048</u>	<u>5,776</u>	<u>6,546</u>	<u>5,275</u>
Deferred income taxes	182	30	30	414	254	0
Obligations under capital lease	1,070	1,975	1,975	329	0	0
Long-term debt	0	0	0	0	0	0
Shareholders' equity	<u>29,468</u>	<u>29,486</u>	<u>32,220</u>	<u>42,481</u>	<u>13,686</u>	<u>1,252</u>
Total liabilities and equity	<u>37,082</u>	<u>37,569</u>	<u>41,273</u>	<u>49,000</u>	<u>20,486</u>	<u>6,527</u>
Market price per share for fiscal year-high	12..563	3.125	9.375	21.000	16.750	
Market price per share for fiscal year-low	5.375	1.875	3.625	13.250	2.750	

COMPTECH, INC.  
FINANCIAL STATEMENTS AND SUPPLEMENTS

VALUATION: COMPTECH, INC

A.1 INCOME STATEMENTS\*

	Nov-85 (1 <sup>st</sup> 6 mos.)	May-85	May-84
Net sales	3,903	3,273	0
Cost of sales	<u>1,490</u>	<u>1,197</u>	<u>(0)</u>
Gross profit	<u>2,413</u>	<u>2,076</u>	<u>0</u>
Operating expenses			
Product development	528	972	223
Marketing, administrative and general	1,378	1,594	509
Depreciation and amortization	<u>130</u>	<u>129</u>	<u>42</u>
	<u>2,036</u>	<u>2,695</u>	<u>774</u>
Net operating income	377	(619)	247
Nonoperating interest income	<u>81</u>	<u>87</u>	<u>0</u>
Earnings before interest and taxes	458	(532)	(527)
Interest expense	<u>327</u>	<u>223</u>	<u>0</u>
Income before taxes	131	(755)	(527)
Income tax expense	<u>52</u>	<u>0</u>	<u>0</u>
Net income (loss)	79	(755)	(527)
Common stock dividends	<u>0</u>	<u>0</u>	<u>0</u>
Retained earnings	<u>79</u>	<u>(755)</u>	<u>(527)</u>
Fully diluted common stock shares	<u>4,145</u>	<u>3,880</u>	<u>3,473</u>

\*Figures are in thousands of dollars.

COMPTECH, INC.  
A.2 BALANCE SHEETS

	Nov-85 (1st 6 mos.)	May-85	May-84
Cash and marketable securities	1,357	1,160	2,602
Accounts receivable	1,992	677	0
Inventories	1,148	344	35
Prepaid expenses	<u>78</u>	<u>51</u>	<u>4</u>
Total current assets	<u>4,575</u>	<u>2,232</u>	<u>2,641</u>
Property, plant and equipment-at cost			
Land	0	0	0
Machinery and other equipment	44\$	228	66
Furniture and fixtures	165	194	53
Leasehold improvements	71	93	12
Tooling and dies	<u>440</u>	<u>379</u>	<u>148</u>
	1,124	894	279
Accumulated depreciation and amortization	(293)	(172)	(42)
Net property, plant and equipment	831	722	237
Net organization costs	73	81	11
Other assets	<u>181</u>	<u>178</u>	<u>35</u>
Total assets	<u>5,660</u>	<u>3,213</u>	<u>2,924</u>
Short-term debt	939	0	0
Accounts payable	1,070	358	28
Accrued interest	43	163	0
Other accrued liabilities	<u>277</u>	<u>75</u>	<u>10</u>
Total current liabilities	<u>2,329</u>	<u>595</u>	<u>38</u>
Deferred taxes	0	0	0
Other liabilities	34	0	0
Long-term debt	488	488	0
Shareholder's equity	<u>2,809</u>	<u>2,129</u>	<u>2,886</u>
Total liabilities and equity	<u>5,660</u>	<u>3,213</u>	<u>2,924</u>

\*Figures are in thousands of dollars.

A.3 SUPPLEMENTARY DATA  
(COMPTECH VALUATION DATA)

U.S. T-Bills, 3-month*	7.20%	7.56%	9.90 %
U.S. Government Bonds, 10-year*	9.78%	10.85%	13.41 %
Corporate Bonds, AAA*	10.55%	11.72%	13.28%
Corporate Bonds, BAA*	<u>11.99%</u>	<u>13.15%</u>	<u>14.74%</u>

Industry Beta (Electronics)		
Operating risk beta		0.94
Financial risk beta		<u>0.28</u>
Total risk beta		<u>1.22</u>

\*Source: Economic Report of the President, 1985

HISTORICAL RISK PREMIA: 1926-1985\*

		GEOMETRIC AVERAGE	ARITHMETIC AVERAGE
Small stock risk premiums (small stocks - stocks)	1966-1985	6.6%	9.0%
	1926-1985	2.8%	6.5%
Equity risk premiums (stocks - bills)	1966-1985	1.4%	2.7%
	1926-1985	6.5%	8.4%
Default risk premiums (L-T corps - L-T govts)	1966-1985	0.7%	0.8%
	1926-1985	0.7%	0.7%
Maturity risk premiums (L-T govts - bills)	1966-1985	1.3%	0.8%
	1926-1985	0.7%	0.9%

\*Source: Stocks, Bonds, Bills, and Inflation: 1985 Yearbook Chicago, Ibbotson Associates, 1985

(PROJECTIONS PROVIDED BY COMPTECH BASED  
ON ASSUMPTIONS GIVEN IN A.6)

A.4 PROFORMA INCOME

STATEMENTS

COMPTECH, INC

	ACTUAL			PROJECTED		
	Nov-85	Nov-86	Nov-87	Nov-88	Nov-89	Nov-90
Net sales	3,903	12,870	16,525	21,219	27,245	34,984
Cost of sales	<u>1,490</u>	<u>4,916</u>	<u>6,313</u>	<u>8,106</u>	<u>10,408</u>	<u>13,364</u>
Gross profit	<u>2,413</u>	<u>7,954</u>	<u>10,212</u>	<u>13,113</u>	<u>16,837</u>	<u>21,620</u>
Operating expenses						
All except depreciation	1,906	6,293	8,081	10,376	13,323	17,108
Depreciation and amortization	<u>130</u>	<u>278</u>	<u>428</u>	<u>549</u>	<u>705</u>	
<u>905</u>						
	2,036	6,571	8,509	10,925	14,028	18,013
Net operating income	377	1,383	1,703	2,188	2,809	3,607
Nonoperating (interest) Income	<u>81</u>	<u>95</u>	<u>95</u>	<u>95</u>	<u>95</u>	
<u>95</u>						
Earnings before interest and taxes	458	1,478	1,798	2,283	2,904	3,702
Interest expense <sup>1</sup>	<u>327</u>	<u>171</u>	<u>176</u>	<u>212</u>	<u>257</u>	<u>316</u>
Income before taxes	131	1,307	1,622	2,071	2,647	3,386
Income tax expense	<u>52</u>	<u>523</u>	<u>649</u>	<u>828</u>	<u>1,059</u>	
<u>1,354</u>						
Net income	79	784	973	1,243	1,588	2,032
Common stock dividends <sup>1</sup>	<u>0</u>	<u>161</u>	<u>283</u>	<u>356</u>	<u>449</u>	
<u>570</u>						
Retained earnings <sup>2</sup>	<u>79</u>	<u>623</u>	<u>690</u>	<u>887</u>	<u>1,139</u>	<u>1,462</u>

<sup>1</sup> Based upon beginning balances

<sup>2</sup> Computed as change in shareholders' equity

(PROJECTIONS PROVIDED BY COMPETC BASED  
ON ASSUMPTIONS GIVEN IN A.6)

A.5 PROFORMA BALANCE SHEETS

	ACTUAL			PROJECTED		
	Nov-85	Nov-86	Nov-87	Nov-88	Nov-89	Nov-90
Cash and marketable securities <sup>1</sup>	<u>1,357</u>	<u>1,357</u>	<u>1,357</u>	<u>1,357</u>	<u>1,357</u>	<u>1,357</u>
Accounts receivable <sup>2</sup>	1,992	2,200	2,824	3,627	4,657	5,979
Inventories <sup>2</sup>	1,148	1,230	1,580	2,029	2,605	3,345
Prepaid expenses <sup>2</sup>	78	106	136	174	224	288
	<u>3,218</u>	<u>3,536</u>	<u>4,540</u>	<u>5,830</u>	<u>7,486</u>	<u>9,612</u>
Accounts payable <sup>2</sup>	1,070	1,178	1,512	1,942	2,493	3,201
Accrued interest <sup>2</sup>	43	170	218	280	359	462
Other accrued liabilities <sup>2</sup>	<u>277</u>	<u>290</u>	<u>373</u>	<u>479</u>	<u>616</u>	
<u>790</u>						
	<u>1,391</u>	<u>1,638</u>	<u>2,103</u>	<u>2,701</u>	<u>3,468</u>	<u>4,453</u>
Net working capital	1,827	1,898	2,437	3,129	4,018	5,159
Net property, plant and equipment <sup>3</sup>	831	1,281	1,644	2,111	2,711	3,481
Net organization costs <sup>3</sup>	73	73	73	73	73	73
Other assets <sup>3</sup>	<u>181</u>	<u>295</u>	<u>379</u>	<u>487</u>	<u>625</u>	
<u>803</u>						
Total capitalization	<u>4,269</u>	<u>4,904</u>	<u>5,890</u>	<u>7,157</u>	<u>8,784</u>	<u>10,873</u>
Deferred taxes <sup>4</sup>	0	0	0	0	0	0
Other liabilities <sup>4</sup>	34	0	0	0	0	0
Short and long-term debts	1,426	1,471	1,767	2,147	2,635	3,262
Shareholders' equity <sup>6</sup>	<u>2,809</u>	<u>3,433</u>	<u>4,123</u>	<u>5,010</u>	<u>6,149</u>	<u>7,611</u>
Total capitalization	<u>4,269</u>	<u>4,904</u>	<u>5,890</u>	<u>7,157</u>	<u>8,784</u>	<u>10,873</u>

<sup>1</sup>Assumes no change

<sup>2</sup>Computed based on formula:  $X(t) = \text{Period} \times (\text{Sales}/\text{Day})$

<sup>3</sup>Computed based on formula:  $X(t) = \text{Sales}/\text{Turnover}$

<sup>4</sup>Computed based on formula:  $X(t) = \% \times \text{Sales}$

<sup>5</sup>Assumes total debt to assets to total capitalization is maintained

<sup>6</sup>Assumes preferred stock to total capitalization is maintained

<sup>7</sup>Assumes equity to total capitalization is maintained

## A.6 ASSUMPTIONS FOR PRO FORMA

### STATEMENTS

(01)	Sales growth rate		50%	(a)
	First year*		25.0%	(a)
	Second year to fifth year**			
(02)	Cost of sales as a % of sales		38.2%	(b)
(03)	Operating expense excluding depreciation as % of sales		48.9%	(b)
(04)	Depreciation as a % of average ending net plant		33.4%	(b)
(05)	Interest earned on marketable securities		7.0%	(b)
(06)	Average interest rate on debt		12.0%	(b)
(07)	Corporate income tax rate		40.0%	(b)
(08)	Accounts receivable	period, days	61.5	(b)
(09)	Inventories	period, days	34.4	(b)
(10)	Prepaid expenses	turnover	121.5	(b)
(11)	Net property, plant, and equipment	turnover	10.1	(b)
(12)	Net organization costs	turnover	no change	(b)
(13)	Other assets	turnover	43.5	(b)
(14)	Accounts payable	period, days	32.9	(b)
(15)	Accrued interest	period, days	4.8	(b)
(16)	Other accrued liabilities	period, days	8.1	(b)
(17)	Deferred taxes	as % of sales	0.0%	(b)
(18)	Other liabilities	as % of sales	0.0%	(b)
(19)	Debt to total capitalization		30.0%	(b)
(20)	Equity to total capitalization		70.0%	(b)

(a) Assumed values

(b) Most recent year

\*Note that Comptech actual sales up to Nov. '85 are only for the first six months of that year on the Proforma Statements.

\*\*Note that the assumed growth rate of 25 percent is compounded daily. This is equivalent to approximately 28.5% annual rate.

## **UNICOMP, INC.**

### **SITUATION II (JULY 1986)**

For the second time, Unicom's financial department had been asked to develop an earnings forecast, and John was assigned the task. (See Appendix to Situation II, Earnings Forecast Background Information.)

In the past, Unicom's management had refused to provide public forecasts. They felt issuing a forecast focused undue attention on a single number and distracted investors from considering the more important strengths of the company. Also, Unicom's management was keenly aware that failure to achieve the projected forecast could have a negative impact on stock price. In the absence of company forecasts, several investment analysts had provided clients with their own estimates of Unicom's earnings. More than once these estimates had been too optimistic. When the company failed to attain the estimates, the price of the stock had been adversely affected. As a result, three years ago the company issued an earnings forecast. However, no forecasts were offered the following two years.

In June of '86, John was asked to put together an earnings forecast for fiscal '87. He realized the importance of this assignment since the company was planning to make another stock offering soon.

During fiscal '86 (which ended on May 31 the company had posted a small profit. Net sales had increased by 10 percent, and cost of sales had climbed by only 4.5 percent over 1985. The company had managed to cut its operating expenses by 4 percent, and by the end of the year, the company had after-tax income of \$.5 million.

John felt Unicom had turned the corner, and by late June he thought he had completed the estimate. It looked like Unicom would have a decent year, even though the company was still trying to integrate Comptech's operations and several Japanese companies were providing stiff competition. The company anticipated net sales would increase by 20 percent to \$70.3 million, and cost of sales would increase to \$39.6 million. Operating expenses would climb by 16 percent to \$27.4 million. John and his team estimated year-end earnings after taxes would be \$1.8 to \$2.2 million. This was a welcome change from the losses of previous years.

The day before the forecast was to be released, John had dinner with Pete Sovik, his counterpart at one of Unicom's major computer chip suppliers. Pete told John that because of the heavy demand for their specialized computer chips, they were planning to cut the number of chips shipped to Unicom by 15 percent. Since the chips were custom designed and required special equipment to manufacture, John realized another supplier could not provide the chips without a delay of perhaps three months. The chips were needed in almost every product made by Unicom. John calculated the shortage would cut their production by at least 10 percent and possibly more. Also, if there was a general shortage of chips, manufacturing costs would surely rise. All this was sure to have a material impact on company earnings.

The next morning John called Krill. "Tom, last night at dinner, Pete Sovik told me our chip supply would be cut by 15%. I need a few more days to recalculate the forecast in that light."

“No, they can’t possibly cut our supply;” Krill replied. “I need some time to think about this. Call you back in an hour.”

Later Krill gave John his reply. “Percy and I talked about it, John, and a delay won’t be necessary. You know we’re planning a stock offering in the next few weeks. If the price of stock drops sharply, we won’t be able to raise enough cash to finance our product development.”

“The forecast cannot be pessimistic. Go ahead and issue the forecast prepared. This is really last minute news—really just a rumor. Once the stock offering is out, you can issue a revised forecast if the rumor turns out to be true.”

John hung up and pondered the situation. He was convinced his friend’s information was accurate. Pete was a cautious person and would not pass on the information unless it was reliable.

## **APPENDIX TO SITUATION II EARNINGS FORECAST BACKGROUND INFORMATION**

Surveys show that about 10 to 15 percent of publicly held corporations in the U.S. voluntarily publish annual earnings forecasts. (See Lees, F.A., *Public Disclosure of Corporate Earnings Forecasts*. New York: The Conference Board, 1981.) Some of these forecasts are in the form of a point estimate, such as a forecast of 4.50 for the forthcoming annual earnings-per-share figure. Others are open-ended forecasts, for more than or less than a given amount, but with one bound not given.

There are also “soft” descriptive or qualitative forecasts without a numerical amount (e.g., “this year’s earnings will be a record”).

During the 1970s, the SEC considered requiring public firms to regularly disclose forecasts of earnings in their financial reports. While such a decision was not made, the SEC encouraged forecast disclosure by adopting a rule for prospective information disclosure. This places the burden of proof in litigation on the user of the forecast. The SEC’s “safe harbor” is available only if; (1) the prospective financial statements are included in a filing with the SEC or in the annual report to shareholders and (2) the registrant’s filing of form 10-K is up to date. The SEC’s decision not to mandate forecast disclosure was probably motivated by concerns that the private and social costs of such forecasts might in some cases outweigh the benefits. Such costs include preparing and possibly auditing the forecasts; possible costs of disclosing proprietary information that could benefit competitors; litigation costs; and the possibility of manipulating investors, lenders and customers /suppliers.

A survey of 39 auditors gave the following “perception of management’s motivation to forecast”:

- (1) influence market price-43%;
- (2) public relations-18%;
- (3) communication with analysts-15%;
- (4) public responsibility-13%;
- (5) peer competition-10%.

(See Danos, D. and Imhoff, E., “The Auditor and Financial Forecasts.” *The Journal of Accountancy*, June, 1981). That earnings forecasts benefit financial information users is suggested by the fact that many financial analysts and security firms provide such forecasts for a fee. Various financial outfits collect such individual forecasts and aggregate them to provide a more stable estimate (“consensus forecasts”).

Among the major empirical findings (see Foster, G., *Financial Statement Analysis*. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1986, pp. 271-291) regarding earnings forecasts are the following:

- The publication of such forecasts is associated, on the average, with a change in the stock prices of disclosing firms. This suggests such forecasts are regarded by investors as providing relevant information.
- Firms that publish earnings forecasts tend to be “good news” firms. These are firms experiencing, on the average, in the year of the forecasts, an unusual earnings increase relative to their past or to similar firms. Also, firms that publish forecasts tend to have a relatively stable (less variable) series of earnings. Very few firms issue consistent repeat forecasts. Most firms publish forecasts in a given profitable year or two, then disappear from the group of forecasting firms.
- Forecasters are, on the average, substantially larger than nonforecasting firms.
- Empirical findings indicate that management forecasts tend to be, on the average, more accurate than both extrapolative forecasts (i.e., mechanical forecasting techniques using past values of earnings) and those provided by analysts. This finding appears to support the frequently heard contention by managers that they publish forecasts in order to “improve” or “correct” analyst forecasts.
- Forecasts published by firms during the last month of the fiscal year are, on the average, “bad news” forecasts. That is, they are published by firms experiencing an unexpected decrease in earnings.
- Not surprisingly, analysts’ forecasts become more accurate as the time interval between forecasts and the subsequent publication of earnings shortens. Analyst forecasts were found to be, on the average, more accurate than forecasts generated by extrapolative (time series) models. It was found that analysts’ forecast revisions are associated with stock price changes, suggesting that investors found such revisions informative.

Based on the empirical evidence mentioned above as well as casual observations and statements by managers, firms appear to disclose or nondisclose earnings forecasts for the following reasons:

- Earnings forecasts seem to be aimed at:
  - Correcting undervaluation of shares by investors.
  - Modifying forecasts and evaluations made by financial analysts.
  - Capturing the attention of the investment community
- Reasons for not disclosing forecasts:
  - Disclosure of current year’s earnings will direct excessive attention to the short-term performance, at the expense of an in-depth, long-term analysis.
  - Given the considerable economic uncertainty surrounding the firm, any forecast will tend to be very inaccurate and possibly misleading.
  - Forecasts will expose firms and managers to possible litigation. Forecasts will motivate managers to alter decisions in order to meet the forecast rather than to meet the firm’s overall objective (e.g., maximizing shareholder welfare). This is generally known as the “moral hazard” problem.
  - Forecast disclosure might provide an edge to competitors.

- Some of the reasons people are skeptical of disclosing forecasts to users are:
  - Forecast information is generally biased. Only firms with good news will tend to publish forecasts.
  - Earnings forecasts can be used by managers to manipulate investors and lenders.
  - Forecasts are very difficult to audit (ex ante) and evaluate (ex post). Large discrepancies between forecasts and the subsequently realized earnings can be attributed to either.
    - poor forecasting ability manipulated forecasts, or
    - the occurrence of economic events unforeseen at the time of the forecast.

Given these difficulties, it would be difficult to discipline managers to disclose honest, high-quality forecasts.

**UNICOMP, INC  
SITUATION III  
(DECEMBER 1987)**

John found himself serving as de facto head of the finance department, but without any title. A week earlier, Krill had left the company. The chip shortage announced by Pete Sovik last year become common knowledge within days. As a result, several analysts had immediately issued unfavorable earnings estimates for Unicom. Unicom's stock price had plummeted. Krill found himself forced to withdraw the stock offering. When the company found itself in dire need of cash, the shortage was blamed on Krill and his "poor timing of the stock offering." John was asked to run the office until a replacement was found.

The past year had not been good. Economic slowdown, Japanese competition, and problems with suppliers had cut heavily into the company's earnings. The increased sales of IBM compatible microcomputers the company had hoped for (based on Comptech's projections) never materialized. Dozens of companies had sprung up overnight selling cheap IBM clones. Supply was overwhelming demand. Instead of injecting needed revenues into the company, the Comptech acquisition was a net drain on Unicom's resources. Unicom showed losses of \$19 million on its May 31, 1986, annual statements.

Nothing had improved since then. By the end of its second quarter, the company had net operating losses of slightly over \$7 million. As a result, banks were unwilling to lend Unicom money.

In this context, the President called a meeting of the vice-presidents, and invited John. The question before them was simple: What should the company do to acquire the cash it desperately needed? The President had a suggestion, and he asked John to advise them.

The company, Percy pointed out, had one supply of cash it never touched: the employee pension plan. The plan had been set up ten years ago as a defined benefit plan, and funds had been set aside on the assumption they would grow at 8 percent per year. (See "pension contributions" in Appendix exhibits for Situation L). Due to high interest rates and a rising stock market, the return averaged almost 17.2 percent per year. The fund now contained roughly \$.8 million more than the amount needed to provide employees with the benefits originally promised to them. (See "deferred pension benefits" in Situation I Appendix. Also see Appendix to Situation III, Employee Pension Plan Background Information.)

According to the Employment Retirement Income Security Act of 1974, when a firm terminates its plan and distributes the promised benefits to employees, the remaining assets may revert to the firm. So, if the company terminated the plan at this time, it would be able to use the \$.8 million in excess funds.

"I checked things out with our lawyer," said Percy "and he agrees we wouldn't have any legal exposure if we terminated the plan. The vice presidents should be in my office any minute now, John, and I want you to give them some advice on terminating the overfunded plan and using the surplus as a source of cash."

## **APPENDIX TO SITUATION III EMPLOYEE PENSION PLAN BACKGROUND INFORMATION**

There are generally two kinds of pension plans: defined benefit plans and defined contribution plans. Unicom has a defined benefit plan.

In a defined benefit plan, the company guarantees that a set amount of money will be given to the employee upon his or her retirement, usually in the form of an annuity. During the employee's worklife, the company makes payments to a pension fund. Generally this is at a rate actuarially calculated so that the fund will be large enough to enable the company to provide the guaranteed retirement money. The rate is determined on the assumption of pension fund investments returns, such as 8 percent. The actual return may be higher or lower, depending on the investments selected by the fund managers and various economic factors. Returns are typically higher during inflationary periods. When the pension fund grows larger than the amount needed to pay out the funds guaranteed to the employees, the fund is said to be "overfunded," and the "surplus" funds (i.e., the amounts over and above the funds guaranteed to the employees) can be said to result from "erroneous actuarial computation."

In a defined *contribution plan*, the company usually makes a monthly payment to the employee's pension fund, calculated as a given percentage of the employee's salary. The funds are invested, and at retirement the funds *plus all earnings whatever their level* belong wholly to the employee. The funds are usually not distributed in a lump sum but are used to buy an annuity that provides a future monthly income for the employee.

Terminations became popular in the early and mid-1980s when a large number of pension plans were "overfunded." These terminations frequently distribute the surplus assets from pension funds to the firm.

Most terminations are not made because of bankruptcy or financial distress, but appear to be motivated by a desire to put assets to corporate uses, e.g., funding new acquisitions, retiring long-term debt, fighting off takeovers, funding expansion, etc. Employees typically have no voice in the decision to terminate the plan. Hearings held by the Select Committee on Aging of the House of Representatives, Ninety-Eighth Congress, September 1983 ("Pension Asset Raids," U.S. Government Printing Office, Washington: 1984) revealed that at that date over 114 companies had terminated pension plans of \$1 million or more.

According to the Employee Retirement Income Security Act of 1974 (ERISA), surplus assets in a defined benefit plan may not be removed from the plan as long as it is active. Moreover, ERISA, Section 403, states that "the assets of the plan shall never inure to the benefit of any employer" and shall be used for the "exclusive benefit" of plan participants. Section 404 adds that the manager of a plan "shall discharge his duties with respect to the plan solely in the interest of plan participants... for the exclusive purpose of providing benefits to plan participants... with care, skill, prudence and diligence" so long as the plan is active.

However, if the firm terminates the plan, whatever surplus funds remain after the accrued benefits guaranteed to the employees have been disbursed may legally revert to the firm. After all liabilities to the employees have been satisfied (usually by purchasing an annuity from an insurance company), ERISA permits the remaining "surplus" assets to be returned to the employer as a "reversion." The authority for asset reversions after termination appears in Section 404 of ERISA. It is not clear under ERISA whether the fiduciary duties in Sections 403 and 404 of the act also apply to the decision to terminate a defined benefit plan simply to have access to

the surplus assets. The Department of Labor has taken the position that a plan sponsor is free to terminate a pension plan at any time and for any reason.

The Internal Revenue Code Section 401(a)(2) and Treasury Regulation L401-2 specify that surplus assets may revert to the plan sponsor if they are the results of “erroneous actuarial computation” based on “reasonable” actuarial assumptions. The employer may not be entitled to a reversion if the surplus is the result of assumptions that are not “reasonable” (for example, if the employer failed to review periodically interest rates, salary scales, mortality rates, turnover, etc.). If the surplus results from design rather than error, the employer also is not entitled to reversion. IRS Revenue Ruling 83-52 on the subject states: “When the fixed and contingent liabilities are discharged... the remaining assets may be considered surplus arising from actuarial error and revert to the employer.”

The Financial Accounting Standards Board (FASB) recently specified a uniform actuarial method to be used by all firms for their pension plans (Statement of Financial Accounting Standards No. 87), prescribed new pension plan disclosures (*ibid.*), and prescribed a new approach to accounting for gains on pension plan termination (*ibid.*, No. 88).