IN THE COURT OF CHANCERY OF THE STATE OF DELAWARE IN AND FOR NEW CASTLE COUNTY

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WILLIAM B. WEINBERGER, ;
    Plaintiff,
    v.
UOP, INC., THE SIGNAL
COMPANIES, INC., SIGCO
INCORPORATED, LEHMAN BROTHERS )
KUHN LOEB, INC., CHARLES S.
ARLEDGE, BREWSTER L. ARMS,
ANDREW J. CHITIEA, JAMES V. )
CRAWFORD, JAMES W. GLANVILLE, )
RICHARD A. LENON, JOHN O.
LOGAN, FRANK J. PIZZITOLA,
WILLIAM J. QUINN, FORREST N. )
SHUMWAY, ROBERT S.
STEVENSON, MAYNARD P. VENEMA, )
WILLIAM E. WALKUP and HARRY H.)
WETZEL,
Defendants.
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PLAINTIFF'S PRE-TRIAL MEMORANDUM ON REMEDY

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Wilmington, Delaware 19801
Attorneys for Plaintiff


## PLAINTIFF'S PRE-TRIAL BRIEF ON THE THE PROPER REMEDY

INTRODUCTION
I. IN FINDING A REMEDY, THE COURT SHOULD DETERMINE THE PRICE THE ARM'S LENGTH BARGAINING WOULD HAVE PRODUCED
II. THE VALUE OF THE MINORITY SHARES WAS IN EXCESS OF \$26.00 PER SHARE
A. SINCE 1975, UOP HAD INCREASED THE QUANTITY AND QUALITY OF ITS EARNINGS FROM OPERATIONS
B. UOP HAD SIGNIFICANT ASSETS WHICH CONTRIBUTED LITTLE TO EARNINGS, BUT WHICH ADDED A SEPARATE AND DISTINCT ELEMENT OF VALUE FOR AN ACQUIRING COMPANY
III. SIGNAL'S $\$ 21.00$ PER SHARE PRICE DOES NOT REFLECT THE MARKET VALUE OF UOP PLUS SUBSTANTIAL PREMIUMS PAID FOR SIMILAR COMPANIES
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A. CURRENT ASSETS ARE CORRECTLY VALUED AT BALANCE SHEET FIGURES
B. FIXED ASSETS SHOULD BE VALUED AT CURRENT REPLACEMENT COSTS, RATHER THAN BOOK VALUE
C. LAND SHOULD BE VALUED AT ITS CURRENT APPRAISAL VALUE
D. PATENTS SHOULD BE VALUED AT THEIR APPRAISED VALUE

## REMEDY ARGUMENT

A. The 1975 Tender and Purchase of UOP Shares by Signal

In 1975, Signal acquired its controlling interest in UOP. By an overscribed tender at $\$ 21.00$ and a direct purchase also at $\$ 21.00$, Signal obtained $50.5 \%$ of UOP's common stock. The price of $\$ 21.00$ both for the tender and for the sale of UOP treasury stock, was determined by arm's length negotiation between Messrs. Logan and Glanville of Lehman Brothers for UOP and Messrs. Shumway and Royatyn of Lazard Freres on behalf of Signal. Mr. Logan originally demanded $\$ 25.00$ for UOP: Mr. Shumway offered $\$ 19.00$ for Signal. The eventual price of $\$ 21.00$ was the culmination of the bargaining between the parties.

## B. The-Come-By-Chance Refinery Disaster

In 1976, UOP wrote off $\$ 31$ million as a result of the Come-By-Chance Refinery problem. This resulted in a loss for UOP. However, though litigation surrounding the Come-ByChance Refinery continued through 1978, the management and counsel of UOP and Signal stated in annual reports and filings with the SEC that the litigation was without merit, could be successfully defended and that, in any case, the outcome of the litigation would not have a material effect on UOP or Signal.
C. Lehman Brothers' 1976 Memorandum Advising Signal It Was In Signal's Interest to Cash-Out the Minority Stockholders for $\$ 21.00$

In 1976, Mr. Glanville, a UOP Board member and a managing director of Lehman Brothers, had Mr. Altman of Lehman Brothers prepare a Memorandum directed to Mr. Shumway, the President of Signal, advising Signal that, in Lehman Brothers' opinion, it was in Signal's best interest at that time (that is, 1976) to merge out the 49.5 \% interest of the independent stockholders of UOP for $\$ 21.00$. Besides presenting an undisclosed conflict of interest in 1978, this opinion shows that Lehman Brothers believed that in 1976, in the midst of the Come-By-Chance fiasco, Signal's interests would be best served to pay $\$ 21.00$ for the $49.5 \%$ of UOP owned by the minority shareholders. Since 1976, the financial fortunes of UOP have consistently improved in virtually all respects. (If $49.5 \%$ of UOP was worth $\$ 21.00$ in 1976 to Signal, $49.5 \%$ was worth at least $\$ 5.00$ more in 1978 to Signal.)
D. UOP'S 1977 REPURCHASE PROGRAM OF ITS STOCK AT $\$ 18.00$

UOP's 1977 Annual Report disclosed that, though it had extended its repurchase offer for blocks of less than 20 shares at $\$ 18.00$ (well above the current market price), it had only received a total of 18,950 shares (Ex. 189):

On May 23, 1977, the company offered to purchase up to 59,000 shares of its common stock for cash at $\$ 18.00$ net, per
share to shareholders of record on May 11 , 1977 with aggregate holdings of 20 or fewer shares. The offer expired on June 17, 1977 and was extended to June $30,1977$. The company acquired 18,950 shares at a cost of $\$ 341,100$. 11,605 of these shares were utilized as the 1977 contribution to the employees stock ownership plan.
E. Signal Management's Determination of Price For the 1978 Cashout Merger

In January or February of 1978, Mr. Shumway, President of Signal, directed Mr. Arledge, Vice President and Director of Planning, and Mr. Chitiea, Director of Finances, to work up information regarding the acquisition by signal of the balance of the UOP common shares. (Shumway 27-35) Mr. Shumway, in effect, said that it was the best economic alternative for Signal's cash at the time. (Shumway 43) The eventual resultant Signal studies showed that the acquisition would be favorable for Signal even at $\$ 24.00$ a share. (Ex. 74) Though Signal itself was the majority stockholder and thus a fiduciary of the minority, and though Messrs. Shumway, Arledge and Chitiea (as well as Messrs. Walkup and Wetzel) were all directors of UOP, no evaluation of the value of the UOP shares was made or even suggested: Signal's studies were all directed to the question as to what price would be profitable for Signal. (Chitiea 47-56; 59) Mr. Shumway "felt" \$2l.00 was fair. (Shumway 55)

## F. The Executive Committee of Signal Made No

 Evaluation of the Value of UOP's SharesWith its own studies done, Signal management came to the Executive Committee of Signal and proposed a cash-out merger of UOP at a price range of $\$ 20.00$ to $\$ 21.00$. (Ex. 37) The Executive Committee consisted entirely of directors of UOP (except for Brewster Arms, Esquire, house counsel for Signal). It never considered the value of UOP shares. Rather, the minutes reflect that Mr. Crawford, President of UOP, pointed out the coincidence of certain numbers relative to UOP's financial affairs at the time of the 1975 negotiation culminating in the tender and purchase of $50.5 \%$ of UOP's stock by Signal with the same numbers on February 28, 1978. (Note) The Executive Committee of Signal concluded that the price range of $\$ 20.00$ to $\$ 21.00$ was fair to the minority shareholders of UOP. This "apple and oranges" comparison was made without the advice of an independent investmant banker. Thus, none of the members of Signal's Executive Committee (who were also directors of UOP), considered the value of the minority's shares, none of these UOP directors considered their fiduciary obligation to negotiate on behalf of the minority on the price for the minority shares, and none of the members of the Executive Committee had any expertise on valuation in cash-out mergers, including the value of minority shareholders or the fair premium.

NOTE: It should be kept in mind that between February 28, 1978 and May 26, 1978; the stock market rose by 13\% and Signal stock rose from about $\$ 28.00$ to $\$ 39.00$ (Purcell 221).
G. Mr. Crawford Agreed With Signal's Proposed Price

Mr. James Crawford was the President and Chief Executive Officer of UOP and a director of UOP. Prior to assuming that post, he had been a long-time employee of Signal and was in fact made a member of the Signal Board. At the time he was brought to Chicago, he stated that the price of $\$ 20.00$ to $\$ 21.00$ was "generous" when he was first told privately about the price by Mr. Walkup and Mr. Shumway. (Crawford 44) Mr. Crawford said he thought it was fair to the minority shareholders of UOP because of the apparent coincidence between certain financial numbers at the time of the 1975 negotiations culminating in a tender and purchase and these same numbers on February 28, 1978. (Ex. 37) Mr. Crawford had made no determination himself, nor had he through his own financial staff or an independent banker received any expert advice on the value of the UOP shares before simply agreeing to adopt the position of Signal's management and Executive Committee that \$20-\$21 was fair. (Crawford 44)
H. Mr. Glanville of Lehman Brothers Made No Determination of the Value of the Minority's Shares

Lehman Brothers was requested to give a fairness opinion to the Board and to the minority stockholders of UOP. Mr. Glanville was a director of UOP. He was the Lehman Brothers executive who directed, 1976, the preparation of the study
by Lehman Brothers advising Signal to cash-out the UOP stockholders at $\$ 21.00$. Mr. Glanville told Mr. Crawford there was no need for negotiation (Crawford 119-120) (Note) He testified that his opinion was simply based on the fact that the signal price was the market price plus a $50 \%$ premium. He said that he needed to know nothing more than that the market price was $\$ 14.50$ and that the price being offered was $\$ 21.00$ and he could opine without anything more that the price was fair. (Glanville 117-118)

Mr. Glanville never participated in the hurried "due diligence" visit or brief document review made by junior members of the Lehman Brothers staff, nor did he even review their work product except perhaps to glance through it as he was flying to the Chicago board meeting of UOP on March 6, 1978, to give Lehman Brothers' opinion that the price was fair. Curiously, Mr. Glanville said he thought that the price of $\$ 21.00$ had been negotiated. Mr. Schwarzman, the next senior Lehman Brothers employee did not participate in the work done by juniors at Lehman Brothers over the weekend of March 4-5,

NOTE: In 1975, Mr. Glanville, then a director of UOP, received a fee of $\$ 450,000.00$ for his work in connection with the arm's length negotiation of the tender and purchase by Signal of 50.5\% of the UOP stock. In 1975, he declined to vote at the UOP Board meeting considering the Signal proposal because of his firm's financial interest in the outcome. In contrast, in the 1978 situation, Mr. Glanville voted for the merger at the UOP meeting. He did not disclose that his firm had prepared an opinion advising Signal in 1976 that it was in Signal's interest to cashout the minority UOP stockholders at $\$ 21.00$.

1978 (Schwarzman 34); nor did he make an oral presentation or answer questions at the March 6, 1978 meeting of the UOP Board (Schwarzman 53).

The Lehman Brothers' review was prepared by Mr. Pearson who had been with Lehman Brothers for about one year (Pearson 3). It consists simply of a collection of statistics, many of them lifted from prior Lehman work (Pearson 13-26) (Note). The backup included the 1976 opinion prepared for Mr. Glanville addressed to Mr. Shumway advancing reasons why it was in Signal's best interest to cash-out the minority at $\$ 21.00$ (Pearson 44). Neither Mr. Schwarzman, Mr. Pearson nor Mr. Seegal nor the documents they prepared, ever addressed the question as to why, if it was in Signal's interest to cash-out the minority stockholders at $\$ 21.00$ in 1976, the same shareholders were not entitled to a significantly better price in 1978 in view of the rising financial fortunes of $U O P$ ( $L B-3$ ).

Mr. Pearson's review did not attempt to determine the value of the shares of UOP's minority: instead, the only evaluation or comparison he made was a one-page notation again simply noting the coincidences between certain financial figures in 1975 of the arm's length negotiated price of $\$ 21.00$ for the tender and purchase of shares by Signal and the 1978 cashout merger price (LB-5 - Table I). The review concluded that

NOTE: A copy of the Lehman Brothers' letter opinion of March 6, 1978 and the Lehman Brothers' review ("Summary Data ..." LB5) is attached as Exhibit A.
because of the coincidence, the 1978 cash-out price was fair to the minority shareholders of UOP.

In short, the Lehman Brothers opinion merely added a cosmetic approval to the transaction. It "rubber stamped" its approval on the terms and conditions dictated by the dominant party which stood on both sides of the transaction. Moreover, their opinion was tainted by the fact that Lehman Brothers had previously prepared, in 1976, an opinion directed to Signal, advising that $\$ 21.00$ be the price paid for the elimination of the minority they were to advise in 1978.
I. The UOP Board Never Considered the Value of the UOP Minority Shares

The UOP Board was hastily called together on March 6 , 1978. The UOP meeting was held at the same time as the Signal Board meeting: the two meetings were linked by telephone. (Note) At this meeting, the UOP directors first were told officially of Signal's $\$ 21.00$ price. Some of the UOP directors assumed that the price had been negotiated but none of them asked who conducted the negotiations for UOP's shareholders or what the steps were (Clement 39; Pizzitola 3). They were not told by Mr. Chitiea, nor Mr. Arledge, UOP directors, but

NOTE: No reason has ever been given as to why the two Boards were linked by telephone other than the fact that there were six Signal executives who were directors of both Signal and UOP.

Signal's financial officers, that they had a financial analysis in their possession that showed that even at a price of up to $\$ 24.00$ there would be significant additional net income for Signal (Chitiea 70). They themselves did not refer Signal's proposal to a committee of independent UOP directors (Clement 39). They simply heard a brief explanation given by Mr. William Walkup, a UOP director, and Chairman of the Board of the majority stockholder, Signal. They also heard Mr. Glanville give his opinion that the price of $\$ 21.00$ was fair (Ex. 298). The Board did not hear from Mr. Schwarzman, the Lehman Brothers senior member who had actually participated in the "due diligence" visit to UOP (Schwarzman 5). No one present recalls that any specific questions were asked of Mr. Glanville, nor anyone else (Clement 34-35; Pizzitola 31). Thus, the Board of UOP was not told what the value of the minority shares was nor did they ask. They assumed the price of $\$ 21.00$ was the outcome of negotiations.

The minutes of the Board of UOP of March 6, 1978, make it clear that no real consideration was given as to the value of the minority's shares (Ex. 298). After being alerted, inter alia, to their fiduciary responsibility of "fairness to minority stockholders", being given certain past comparative figures and the budget figures for 1978 and Mr. Glanville's oral report, the Board approved the proposed merger (Ex. 298).
"At the request of Mr . Crawford, Mr. Brackett stated that under Delaware law, the proposed transaction posed two principal questions: (i) its fairness to the minority stockholders, and (ii) its business purpose. He stated that the requisite valid business purpose for mergers recently came into Delaware law through court decisions which apply strict standards of fiduciary behavior to the conduct of majority stockholders in their dealings with the minority. He then reviewed for the board the procedures to be followed by the board and the stockholders for consummation of the proposed merger including filing with the Securities and Exchange Commission the merger proxy statement for review in the context of the recently proposed SEC rules governing "going private transactions.

At Mr. Crawford's request, Mr. Schumann projected visually, and audibly recited for those Directors participating in the meeting by means of a conference telephone, a comparison at the end of each of the past four years and an estimate for the end of the first quarter 1978 of the Corporation's book value per share, earnings per share, current ratios, percentage of longterm debt to total capital, price range of the common stock and accounts of working capital. He also projected visually and audibly recited for those Directors participating in the meeting by means of conference telephone, the estimated net income of the operating units and groups for each month of the first quarter, 1978 and budgeted amounts for the remaining quarters of 1978 and for the year 1978.

The Chairman then presented to the Board for consideration the report of Lehman Brothers Kuhn Loeb with respect to the offer of $\$ 21$ by Signal to the Corporation's stockholders.

Mr. Glanville stated that he became familiar with UOP at the time its capital stock was first offered to the public in
1959. In addition, he has served as a Director of UOP since 1972 and he has had familiarity with UOP affairs for many years. After he and his staff had reviewed what they believed to be pertinent financial and other materials, with complete cooperation of management of UOP, they concluded that the proposed merger offer is fair and equitable to the stockholders of UOP other than Signal. Copies of said report were in each Director's book. For the information of Messrs. Lenon, Pizzitola and Stevenson, Mr. Glanville summarized and read verbatim portions of his report to the Board of Directors.

The Directors then posed questions to Messrs. Glannville and Walkup and Counsel for the corporation with respect to various matters in connection with the proposed transaction. After receiving responses thereto, Messrs. Crawford and Walkup excused themselves from the meeting.

The Chairman then asked Messrs. Lenon, Pizzitola and Stevenson for their comments which were given to those present in the meeting room. After discussion, there was a motion duly made and seconded to adopt the proposed resolutions approving the Merger Agreement and other matters relating thereto, copies of which were in the Directors' books as follows:

WHEREAS, the Board has considered the report of Lehman Brothers Kuhn Loeb Incorporated, dated March 6 , 1978, which states, inter alia, that the proposed merger is fair and equitable to stockholders of the Corporation other than The Signal Companies, Inc. and the Board has considered other factors and deliberated further as was deemed appropriate, copies of said report were distributed to the Directors at the beginning of the meeting;

> RESOLVED that, subject to approval of the stockholders of the Corporation at a meeting to be called by the Board of Directors, as required by the General Corporation Law of Delaware, as amended, the Merger Agreement in substantially the form presented to this meeting is hereby approved and the Board recommends to the stockholders of the Corporation that they approve said Merger Agreement and accept the aforesaid offer to purchase for cash said shares of the Corporation's common stock which is not presently owned by The Signal Companies, Inc.; and further....
J. The Increase in the Price of Signal Stock and the Stock Market in General Between February 28, 1978 and May 22, 1978

On February 28, 1978, UOP's stock closed at \$14.50, the low for the entire month of February, 1978 (Ex. U-7). The announcement of the cash-out merger "capped" UOP's price (Purcell 224). The price rose to slightly less that $\$ 20.00$ after the announcement of the cashout merger, and rose to $\$ 21.00$ just before May 26, 1978 (Purcell 222-223).

Signal's own stock was trading at $\$ 28.00$ on March l, 1978 (Purcell 221). By May 5, 1978, the date of UOP's proxy, Signal's stock closed at about $\$ 39.00$ (Purcell 221). The stock market generally had risen by $13 \%$ (Purcell 221). The Merger Agreement had no provision by which this rise redounded to the benefit of the minority shareholders of UOP (Purcell 225). On the other hand, if by chance the stock market had declined,

Signal had judiciously reserved its right in the Merger Agreement to abort the merger (Ex. U-7). All that would have been necessary was to have the Signal Board and the UOP Board, which Signal controlled, vote to rescind the merger (Ex. U-7) Finally, the Merger Agreement deprived the UOP shareholders of their aliquot share of the second quarter dividend (Ex. 141).

There was no increase in the merger price of $\$ 21.00$ to reflect the $r$ ise in the market and of Signal stock. No update of the "fairness" opinion of the price was provided for or sought from Lehman Brothers at the time of the proxy (May 5, 1978) nor at the time of the annual meeting of vop on May $26,1978$.

## K. The Parties' Experts

The plaintiff retained Mr. Kenneth Bodenstein and Mr. Alfred Hansen of the Chicago appraisal firm of Duff and Phelps as its experts who after a review, issued the following report:

55 East Monroe Street • Chicago. Illinois 60603 (312) 263-2610 • Telex 25-5165

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SPECIAL REPORT

UOP, INC.

April, 1980

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## Introduction and Purpose of Report

Duff and Phelps, Inc., as independent investment and financial analysts, has been retained by counsel for plantiffs to determine:
(1) whether the $\$ 21$ per share cash price the common shareholders of UOP, Inc. (UOP) received from The Signal Companies (Signal) in the 1978 merger was fair and equitable to the UOP common shareholders other than Signal,
(2) if not, what the fair price would have been.

## Background

In April-May, 1975 Signal, after arms length negotiations, acquired $4,300,000$ common shares of UOP through a tender offer at $\$ 21$ per share. At the same time, it acquired an additional $1,500,000$ common shares by direct purchase from the company at the same price. On February 28, 1978 Signal owned 5, 800,000 shares or approximately $50.5 \%$ of UOP's issued and outstanding common shares. On that date, UOP and Signal announced that they were
negotiating for the acquisition for cash by Signal of the $49.5 \%$ of UOP that Signal did not own. On March 2, 1978 Signal announced that its management would recommend a price range of $\$ 20-21$ per share for each outstanding share of UOP common stock not already owned. On March 6, 1978 Signal formally proposed a plan of merger to the UOP Board of Directors based on a $\$ 21$ per share cash payment. On that same date the UOP Board of Directors voted to recommend to its shareholders that they accept the Signal offer.

## Scope of Work

Our analysis is based upon UOP Annual Reports for fiscal years 1973 through 1977 , its $10-\mathrm{K}$ report for 1976 , $10-Q$ report for the quarter ended March 31, 1978, Quarterly Reports to shareholders for 1976 and 1977 and the company's Notice of Annual Meeting and Proxy Statement dated May 5, 1978. We also reviewed the depositions taken of Messrs. Shumway, Crawford, Pizzitola, Walkup, Arledge, Chitiea, Glanville, Seegal, Schwarzman and Pearson and the exhibits referred to in the depositions. We did not interview or visit with UOP management or inspect the company's facilities. Financial data on publicly owned companies used as background information for our analysis were obtained from regularly published sources.

From the various documents made available, the following summarizes UOP's operations and outlook as of March 1978:

## 1. UOP's Field of Operations

UOP operated in the energy services, pollution control, fabricated metals, and transportation equipment areas of the economy. The company was a leader in the design and licensing of petroleum and petrochemical processes, the sale of proprietary catalysts, and engineering and refinery management. UOP's Procon Division provided turn-key construction of petroleum refineries, and petrochemical, liquified gas and solid waste recovery plants and related facilities. In addition, UOP provided systems and equipment for air pollution control installations including electrostatic precipitators, sulfur dioxide removal systems, incinerators, scrubbers and dust collectors.

The Wolverine Division manufactured copper, aluminum, titanium and zirconium tubing and screens for filtration and processing applications.

UOP also manufactured galleys and seats for aircraft application and fixed seating for vehicles and construction and farming equipment as well as equipment and chemicals for water
filtration systems and other high technology applications.
2. UOP's Recent Revenues and Earnings

UOP's recent revenue and earnings history prior to the merger is summarized on the next page.

In 1977, UOP had a much stronger mix of business and higher gross margins than in 1974 though the company's 1977 revenues were about $6.5 \%$ below 1974 peak levels. The decline in revenues is due to the $\$ 180,000,000 \mathrm{dec} 1 \mathrm{ine}$ in construction revenues between 1974 and 1977. This business had very low gross margins ( $1.0 \%$ to $1.5 \%$ ). The loss of construction revenues was offset by an increase of $\$ 56.0$ million in UOP's petroleum, petrochemical and plastics businesses which had gross margins of 8 to $20 \%$. Also, there was a $\$ 53.0$ million increase in transportation equipment products with gross margins of $12-19 \%$. As a result, gross profits increased by $\$ 32.0$ million or $24 \%$ from 1974 to 1977 and were at all time record levels. (See Appendix A.)

The substantial deficit recorded in 1975 reflected both the poor external economic environment and, more importantly, a $\$ 34,391,000$ special one-time writeoff of a receivable involving the Come-By-Chance refinery project. Although 1976's results showed a turnaround, certain business segments had not fully recovered from the depressed conditions of 1975 (i.e., the construction, fabricated metal products, chemical and plastics sectors).


Fiscal 1977 results as represented by operating earnings before taxes and extraordinary items reached peak levels for UOP. In addition, it is our opinion that these earnings were of much higher quality than had been achieved in the companys recent past because they were less dependent on lower margin, more cyclial revenue sources. The 1978 earnings budget expectations continued to indicate favorable growth, $\$ 2.62$ per share before extraordinary items as compared to 1977 's $\$ 2.12$ per share. First quarter 1978 actual results indicated that this budget forecast was indeed attainable.

## 3. Certain Significant Assets

UOP as a high technology company owned 3,045 U.S. patents as well as 6,032 foreign patents. UOP spent annually approximately $4.5 \%$ to $5.0 \%$ of its revenues (excluding completed construction contracts) on research and development. In each of 1976 and 1977 the company was granted in excess of 200 U.S. patents and approximately 600 foreign patents. More importantly UOP received royalties on some 40 process licenses, providing a substantial annual stream of highly profit revenues. Royalty income, although fluctuating, had shown good secular growth over the years.

Year

1972
1973
1974
1975
1976
1977

$$
\begin{array}{r}
\text { Royalties } \\
\hline \\
\$ 25,623 \\
25,278 \\
33,673 \\
35,496 \\
28,660 \\
39,038
\end{array}
$$

$\frac{\begin{array}{c}\text { Research \& Development } \\ \text { Expenses }\end{array}}{\left(000^{\top} s\right)}$
$\$ 16,412$
19,826
21,032
27,487
26,202
28,592

This substantial income stream was represented on the company's balance sheet on December 31, 1977 by patents at cost less amortization of $\$ 2,285,000$. In view of the income stream produced, the underlying market value of these patents is far greater than the $\$ 2.3$ million recorded on the company's books.

UOP, besides its petrochemical and manufacturing facilities, owned approximately 275,000 acres of timber forests in Michigan and Wisconsin, which were undervalued on the balance sheet.
4. Financial Condition

UOP's financial condition as of March 31,1978 was strong and had shown substantial improvement over the recent years.
(In thousands of dollars)
December 31, December 31, December 31, December 31, March 31, 1974
$1975 \quad 1976$
1977
1978

Cash \& Marketable Securities
Working Capital Current Ratio

25,228
114,807
1.74
$\$ 23,779$
91,849
1.93

\$72,979
\$ 46,663

Bank Loans
48,970
53,708
2,380
1,571
1,519
Long Term Debt and Lease Obligations

$$
92,904
$$

$$
89,545
$$

$$
89,382
$$

$$
84,799
$$

$$
82,175
$$

Shareholders
Equity
193,939
Book Value per Share
19.43

182,689
203,702
227,914
237,636
15.91
17.74
19.86
20.67

From yearend 1974 to yearend 1977 working capital increased to $\$ 163$ million from $\$ 115$ million (on a revenue decline of $\$ 50$ million), current ratio increased to 1.95 from 1.74 , and longterm debt decreased by some $\$ 8$ million. More importantly, the company's liquidity increased substantially, with some $\$ 50 \mathrm{mil}-$ lion in short term bank borrowing all but eliminated, while cash and marketable securities increased by some $\$ 48$ million, resulting in a swing of some $\$ 98$ million. UOP at the time had an unused bank line of credit of an additional $\$ 37$ million.

Dividend payments had been somewhat erratic, reflecting the company's performance during the recessions of 1970-71 and 197475. As of March, 1978 the quarterly dividend was increased to 20 cents per share ( 80 cents annually) returning to its peak levels of 1969 and 1970.

| Year | Dividends Per Share |
| :--- | :---: |
| 1972 | $\$$ |
| 1973 | 0.250 |
| 1974 | 0.700 |
| 1975 | 0.675 |
| 1976 | 0.225 |
| 1977 | 0.625 |
| 1978 Estimated | 0.800 |

## 5. Pending Legal Proceedings

As of March 31, 1978 there were a number of pending legal proceedings against the company, several pertaining to the com-
pany's Procon Division and involving claims of breaches of construction contracts and misrepresentation. Management was of the opinion that the suits could be successfully defended, and in any event the ultimate liability resulting there from would not materially adversely affect the company's financial position.

## 6. Summary

In summary, UOP's financial position and earnings performance during the 1977-78 period had shown substantial improvement, with strengthening in the stability and quality of earning power. In addition, the company had an excellent liquidity position, a significant improvement from 1973-1974. Finally, UOP's income producing patents and its timber acreage were substantially undervalued on UOP's balance sheet.

Comparative Analysis

Comparison With Comparable Companies

As background for determining fair value, we have reviewed comparative common stock data of ten publicly traded companies who are involved in the same general lines of business as UOP's major operations. While none of these companies are exactly comparable, the underlying economic factors which affect UOP also
have an impact on these companies. Thus, investors would regard these companies as similar to UOP in their continuing appraisal of relative investment values. This data is presented on the following page. Market prices are as of February 28, 1978, the last full trading day prior to Signal's public announcement of the proposed merger.

A review of the February 28, 1978 market data showed the comparative companies selling in a range from 10.5 times latest available 12 months earnings for Wheelabrator-Frye to a low of 5.7 times for Morrison-Knudsen. This compared with UOP's $7.0 \mathrm{P} / \mathrm{E}$ ratio.

Relative to book values, the stocks sold in a range of from $171 \%$ of book value for Combustion Equipment to a significant discount of $60 \%$ for Revere Copper. UOP sold at a $26 \%$ discount. Ten of the eleven companies (including UOP) paid dividends, with yields ranging from a high of $6.8 \%$ for McKee to a low of $0.7 \%$ for Combustion Equipment, with only Revere Copper paying no dividends. Of those paying dividends, dividend payout fell within a range of $26-46 \%$ of earnings "(with Combustion Equipment's $7 \%$ payout far below the group.)

UOP, INC.
COMPARATIVE COMMON STOCK DATA

|  | Price/Earnings Ratios and Yields |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} \text { Market } \\ 2 / 28 / 78 \end{array}$ | Latest <br> Reported <br> Earnings <br> Per Share ${ }^{\text {a }}$ | $\begin{gathered} P / E \\ \text { Ratio } \\ \hline \end{gathered}$ | Indicated Dividend | $\begin{aligned} & \text { Current } \\ & \text { Yield } \\ & \hline \end{aligned}$ | $\begin{gathered} \% \\ \text { Payout } \\ \hline \end{gathered}$ |
| Wheelabrator-Frye | 29 1/2 | \$2.82 | 10.5 | \$1.10 | $3.7 \%$ | 39\% |
| Combustion Equipment | 14 1/8 | 1.53 | 9.2 | . 10 | . 7 | 76 |
| Pullman | $241 / 4$ | 3.03 | 8.0 | 1.40 | 5.8 4.3 | 46 34 |
| Dravo | 27 | 3.37 | 8.0 | 1.16 | 4.3 | 34 <br> 38 |
| Combustion Engineering | $311 / 4$ | 4.17 | 7.5 | 1.60 | 5.1 | 33 |
| Ampco-Pittsburgh | 13 /8 | 1.81 | 7.5 | . 60 | 4.4 | 3 |
| UOP | $143 / 4$ | 2.12 | 7.0 | . 80 | 5.4 | 38 |
| F1uor | $305 / 8$ | 4.48 | 6.8 | 1.20 | 3.9 | 27 |
| Revere Copper | $107 / 8$ | 1.77 | 6.1 | 1.00 | 6.8 | 39 |
| McKee | $145 / 8$ | 2.54 | 5.8 | 1.00 | 6.8 | 39 |
| Morrison-Knudsen | $333 / 8$ | 5.87 | 5.7 | 1.50 | 4.5 | 26 |


|  | Market Value Versus Book Value |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Primary Market | Shares Out- $\frac{\text { standing }}{\left(000^{\prime} s\right)}$ |  | Range 52 Weeks | $\begin{array}{r} \text { Market } \\ 2 / 28 / 78 \\ \hline \end{array}$ | Book Value <br> Per Share ${ }^{\text {C }}$ | Market as \% of Book |
| Combustion Equipment | NYSE | 7,323 | 21 | 3/8-13 | 14 1/8 | \$ 8.24 | 171\% |
| Wheelabrator-Frye | NYSE | 7,800 | 32 | 1/2-24 5/8 | 29 1/2 | 18.35 | 161 |
| Fluor | NYSE | 15,492 | 43 | 1/8-30 3/8 | $305 / 8$ | 19.87 | 154 |
| Combustion Engineering | NYSE | 15,868 | 41 | 1/4-31 | $311 / 4$ | 27.30 | 114 |
| Dravo | NYSE | 4,985 | 33 | -23 7/8 | 27 | 26.13 | 103 |
| McKee | NYSE | 3,401 | 20 | 1/8-14 1/8 | $145 / 8$ | 14.57 | 100 |
| Morrison-Knudsen | NYSE | 2,941 |  | 7/8-23 3/4 | 33 3/8 | 44.56 | 75 |
| Puliman | NYSE | 10,955 | 35 | 5/8-24 | $241 / 4$ | 32.71 | 74 |
| UOP | NYSE | 11,479 | 18 | 5/8-13 1/2 | 14 3/4 | 19.85 | 74 |
| Ampco-Pittsburgh | NYSE | 2,884 | 14 | - $97 / 8$ | $135 / 8$ | 19.61 | 69 |
| Revere Copper | NYSE | 5,651 |  | 5/8-10 1/2 | 10 7/8 | 26.98 | 40 |

a. Twelve months ended December 31, 1977 except Fluor (October 31, 1977).
b As of 1977 fiscal yearend (adjusted).
c As of 1977 fical yearend

## Going Concern Value

Fair market value on a going concern basis can be defined as the price a willing buyer will pay to a willing seller in an arms length transaction in which both are duly informed about the company and its securities. The prices at which securities are quoted and traded in reasonably active security markets are considered to be representative of the fair market values for minority interests of those securities. Based on the information that was available to the public investor, the $\$ 14.75$ per share price of UOP common stock on February 28 , 1978 represented a reasonable market value for a minority interest in the company.

The announcement of a cash merger will generally have the effect of placing a ceiling on the market price of the stock of the company to be acquired since buyers will be unwilling to pay more than the merger price. As of February 28,1978 the public investor did not have the financial information that UOP management had windicated strong first quarter earnings as well as a favorable 1978 fiscal performance. This information was subsequently released in April, 1978 and in the Proxy Statement issued May 6, 1978 and had no effect on UOP's market price. If this information had been disclosed prior to the merger offer, the price of UOP stock would have risen in response to such favorable financial information, and would thus probably have returned to levels that had previously been attained during the summer of 1977.

The stock market had been in a general decline of some 15$16 \%$ since January, 1977 (based on the broad New York Stock Exchange Composite Stock Index), with levels reached at the end of February, 1978 the lowest since December, 1975. The February, 1978 level proved to be the Madir of the decline: prices rebounded $15 \%$ by May, 1978.

Presented on the following page is an illustration of the general price recovery of the comparable companies during the February-May, 1978 period. Also shown is how the market evaluated those prices against 1978 annual earnings estimates as published by Standard and Poors (S\&P) and the companies' latest 12 month reported earnings. During May, 1978 S\&P published 1978 annual earning forecasts for seven of the eleven companies. UOP's earnings forecast included in the table represents their 1978 budget figure as provided in the company's May 5, 1978 Proxy Statement. The table illustrates that all but Ampco-Pittsburgh had sizeable increases in stock price levels. More importantly, the table illustrates that there "was a general increase in market valuations since late February with the range of earnings multiples increasing from 5.7-10.5 to $6.7-11.4$ based on latest 12 months reported earnings. The range of multiples on May 5, 1978 based on 1978 earnings forecasts was 7.3-9.7. As shown, UOP's price of $205 / 8$ was not out of line with other comparable stock values representing minority interest positions.

UOP, INC.
COMPARATIVE COMMON STOCK DATA

Whee labrator-Frye
Combustion Equipment
Pullman
Dravo
Combustion Engineering
UOP
Fluor
McKee

| Market Price |  |  |
| :---: | :---: | :---: |
| 2/28778 | 575/78 | \% Change |
| 29 1/2 | $331 / 2$ | 14\% |
| $141 / 8$ | 15 | 6 |
| $241 / 4$ | $301 / 2$ | 26 |
| 27 | $281 / 4$ | 5 |
| 31 1/4 | $395 / 8$ | 27 |
| 14 3/4 | 20 5/8 | 40 |
| $305 / 8$ | $353 / 8$ | 16 |
| $145 / 8$ | 17 5/8 | 21 |


| Earnings Per Share |  |
| :---: | :---: |
| Latest Reported <br> 12 Months Earnings <br> (as of 5/5/78) | S\&P's Forecast <br> of 1978 Earnings |
| $\$ 2.95$ | $\$ 3.45$ |
| 1.47 | 1.85 |
| 2.86 | 4.00 |
| 3.38 | 3.65 |
| 4.30 | 4.50 |
|  |  |
| 2.41 | $2.62(\mathrm{~d})$ |
|  | 4.85 |
| 4.54 | 2.25 |


| Price/Earnings Ratio |  |  |
| :---: | :---: | :---: |
| 2/28/78(a) | 575/78(b) | 5/5/78(c) |
| 10.5 | 11.4 | 9.7 |
| 9.2 | 10.2 | 8.1 |
| 8.0 | 10.7 | 7.6 |
| 8.0 | 8.4 | 7.7 |
| 7.5 | 9.2 | 8.8 |
| 7.0 | 8.6 | 7.9 |
| 6.8 | 7.8 | 7.3 |
| 5.8 | 6.9 | 7.8 |

№ S\&P 1978 Earnings Forecast Available:
$\begin{array}{ll}\stackrel{\rightharpoonup}{\omega} & \text { Ampco-Pittsburgh } \\ \vdots & \text { Revere Copper }\end{array}$
(a) February 28, 1978 stock price divided by latest 12 months reported earnings available at that date
(b) May 5, 1978 stock price divided by latest 12 months reported earnings available at that date.
(c) May 5, 1978 stock price divided by S\&P Forecast of 1978 earnings.
(d) 1978 budget as presented in UOP May 5, 1978 proxy statement.

| 13 | $5 / 8$ | 12 | $3 / 8$ | $(9)$ | 1.86 | - | 7.5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $107 / 8$ | 15 | $3 / 4$ | 45 | 2.31 | - | 6.7 | 6.8 |
| $333 / 8$ | $461 / 2$ | 39 | 5.99 | - | 5.7 | 7.8 | - |

## Inadequacy of Premiums

The purchase of controlling interest or $100 \%$ ownership of a company invariably commands a premium over the going concern or minority interest value. The size of such premiums depend upon the qualitative attributes, historical financial performance, and future expectations for the company, as well as the investment environment at the time of purchase or merger. The size of premium should normally represent the end result of active negotiations between the buyer and seller. There were no such negotiations in connection with the Signal/UOP merger.

Tabulated on the next page is a sample of twenty-six (26) mergers/acquisitions that were originally announced during the period June, 1977 through May, 1978. This list is by no means complete in reporting all the successful mergers/acquisitions during that period, but are representive of the general investment atmosphere relating to mergers/acquisitions of $\$ 100$ million or more in total purchase price.

A review of the list shows that these premiums ranged in size from $45 \%$ to $140 \%$ of minority interest values; the average for the group was $78 \%$ with the median at $74 \%$. Price earnings ratios for the group ranged between 5.6 and 33.8 , with a median of 15.0 . (Note: Additionally, a sample of eleven mergers and going private transactions announced during the period in question and inclu-

Merger/Tender offers in Excess of $\$ 100$ mililion
June 1977 through May 1978

ding the Signal/UOP merger, where operating control of the company was already held by the purchaser, confirms the above data having a medium premium of $75 \%$.)

Signal's offer of $\$ 21$ per share represented a premium of only $42 \%$ and a P/E of 9.9 , clearly below the medians in other merger/acquisition offers at the time. The premium and $P / E$ in the UOP merger offer should have at least been around the median level for acquisitions at that time considering the substantial progress the company had made from its problems of fiscal 1975. Furthermore, UOP's earnings were of better quality and its financial position far stronger in 1978 than in 1975 when Signal first tendered for common shares at $\$ 21$ per share. Most importantly, Signal, having certain members of its management and directors as directors and officers of UOP, were in possession of financial information relating to this improved situation and to UOP's continuing favorable earnings outlook that the investing public, including UOP's outside stockholders, did not have.

In summary, the financial premium paid to the outside shareholders of UOP was inadequate when measured by comparative and tender osfers premiums $\wedge$ paid in other cashout mergers in the period. The inadequacy is especially glaring in view of the rising market after the announcement of the merger and the failure to disclose known favorable information to the investing public before the announcement capped the price of UOP stock.

Undervalued Assets and Excess Cash

The $\$ 21$ offer price approximated UOP's March 31, 1978 book value per share of $\$ 20.67$. UOP's book value at the time however was recorded in a conservative manner. In particular, the company's true patent/license positions were not reflected in the merger price.

Patents were carried on the December 31,1977 balance sheet at $\$ 2,285,000$. This contrasts to royalties and license fees of some $\$ 25$ to $\$ 30$ million annually. Thus it is clear that these patents represented a very valuable asset which was severely understated on the balance sheet.

In addition, UOP owned 275,000 acres of forested land and had Canadian timber cutting rights on approximately $1,600,000$ acres. Total land and timber was carried at $\$ 11,157,000$. This figure also included land holdings of about 1,200 acres located throughout the U.S. and Western Europe associated with the company's operations. All UOP's land, including timber acreage, was carried on the books at approximately $\$ 40$ per acre. It is clear, therefore, that there were substantial values related to the timberlands and other land over and above those reflected on the company's balance sheet.

A fair valuation of UOP's assets at the time of the merger would have included the effect on the proposed merger price of the substantial under valuation of the company's patents and land and timber holdings. For example, as to the timberlands, during the period in question and extending through the end of 1978 , several merger/acquisitions involving forest product companies took place. Substantial control premiums and prices in excess of book value were paid, reflecting the typical undervaluation of assets of forest acreage. (See table below.)

|  | Premium to Market | Times <br> Book Value |
| :---: | :---: | :---: |
| St. Regis/Southland | 80\% | 2.6 |
| Time/Inland Container | 70 | 1.5 |
| Georgia Pacific/Hudson Paper | 120 | 2.0 |
| Johns Manville/ |  |  |
| Olinkraft | 90 | 2.1 |

UOP had substantial excess cash representing anywhere from $\$ 35$ to 50 million or from $\$ 3.00$ to $\$ 4.50$ per share, which in turn was not reflected in the offer price of $\$ 21$ per share. At the time of the merger announcement, UOP had only minimal short-term bank borrowing (\$1,571,000 at yearend 1977 versus \$48,970,000 at yearend 1974), had working capital of $\$ 163,000,000$ including cash and marketable securities of $\$ 72,979,000$ and a current ratio of 1.95.

UOP, INC.
COMPARATIVE DATA
1977 Yearend

|  | Current Ratio | Cash \& Market Securities <br> As a \% of Current Liabilities |
| :---: | :---: | :---: |
| Ampco-Pittsburgh | 3.09 | 48.4 |
| Combustion Equipment | 2.48 | 37.3 |
| UOP | 1.95 | 42.8 |
| Revere Copper | 1.76 | 10.2 |
| Wheelabrator-Frye | 1.54 | 36.9 |
| Morrison-Knudsen | 1.50 | 25.0 |
| Pullman | 1.36 | 27.7 |
| McKee | 1.28 | 53.1 |
| Dravo | 1.47 | 14.8 |
| Combustion Engineering | 1.09 | 27.0 |
| Fluor | 0.86 | 22.4 |

Companies like UOP typically operate at current ratio levels which are below what might be as regarded as normal in other industries (see table on next page of comparable companies' statistics.) Acurrent ratio of 1.50 (backed up with UOP's unused bank credit 1 ines of $\$ 37,000,000$ ) would be a reasonable area of operation. Thus free eash balances could have totaled somewhere between \$50-65 million. This excess liquidity was to some extent a result of Signal's purchase in 1975 of 1.5 million UOP common shares at $\$ 21$ per share. The company, since 1975 , never had invested this cash in operations. This had the effect of diluting the public shareholders' operating earnings. If we were to eliminate these shares (and the cash balance associated with them), the following 1977 pro forma income statement could be constructed.

Income from continuing operations
before taxes and extraordinary item \$41,757,000
Less prorated interest income on
$\$ 31.5 \mathrm{million}$
Adjusted Income
Less income taxes
Extraordinary item
$\frac{2,500,000}{\$ 39,257,000}$
$16,386,000$
$\$ 22,871,000$
7,110,000
Net Income
$\$ 29,981,000$

> | As Reported |
| :---: |
| based ori |
| $11,500,000$ shares |
| Outstanding |

Proforma based on 10,000,000 shares Outstanding

Income Per Common Share:
Continuing Operations Extraordinary Item Net Income

$$
\begin{array}{rr}
\$ 2.12 & \$ 2.29 \\
\hline \$ 2.74 & \$ 3.00
\end{array}
$$

Signal's 1.5 million share 1975 investment, represented in 1978 by $\$ 31.5$ million in excess liquidity, resulted in a minimum of $9.5 \%$ earnings dilution to the public shareholders of UOP. This dilution represented an additional $\$ 2$ per share cost to the public shareholders based on the price/earnings multiple reflected by Signal's merger offer.

Stock Alternative

The cashout merger deprived UOP shareholders of future participation in the growth of UOP and realization of the excess values in the company's underlying assets. Had the offer of $\$ 21$ been on a basis of an equivalent exchange of Signal common stock, UOP shareholders would have received 0.74 shares of Signal for each UOP share held. (This is based on the February 28,1978 closing market price of $\$ 28.50$ per share of Signal and a $\$ 21$ price for UOP.) As an example of how the shareholders would have shared in UOP's improved prospects and in the overall market performance by having a stock exchange alternative, by May 5, 1978, the date of the UOP proxy, Signal shares closed at $\$ 39.50$, an increase of $39 \%$. Thus the equivalent value to UOP common shareholders, based on an exchange ratio of 0.74 to one, was approximately $\$ 29.00$. In addition, an exchange of UOP stock for Signal stock would have obviated capital gains consequences for many UOP stockholders. Finally,
those UOP stockholders who did receive Signal stock but who no longer wished to participate in UOP's fortunes by owning the parent Signal stock could have immediately sold their Signal shares.

## Fair Value For Merger

Considering all factors we regard as relevant, we are of the opinion that the $\$ 21$ per common share cash price offered by Signal in its merger proposal was not fair and equitable to the public shareholders of UOP.

If we had been retained by UOP to advise the public shareholders and based on the information that we have reviewed in connection with this study, we would have advised that an appropriate fair value price for merger puposes was not less than $\$ 26$ per share. The $\$ 26$ per share price value was equivalent to 12.3 times fiscal 1977 earnings and 9.9 times management's budgeted 1978 earnings. Additionally, the $\$ 26$ price is $131 \%$ of December 31 , 1977 reported book value, and $126 \%$ of unaudited March 31 , 1978 book value. It represents a premium of $76 \%$ over the $\$ 14.75$ per share market price prior to the merger announcement. This premium and the price, earnings multiples appear reasonable in relation to those reflected in
other mergers/acquisitions during this period of time. This price fairly represents the value relative to the future earnings expectations and asset values that were well known by management and the purchaser.
A.T. Hansen, C.F.A. Executive Vice President
K.A. Bodenstein, C.F.A.

Vice President
Apri1, 1980

## CONSOLIDATED SUMMARY OF OPERATIONS

The consolidated Summary of Operations for the five years ended December 31, 1977 is unaudited but includes all adjustments which UOP considers necessary for a fair presentation of the results of operations for the periods indicated. This Summary should be read in conjunction with the related financial statements and notes thereto included elsewhere in this Proxy Statement.

FIVE-YEAR SUMMARY OF OPERATIONS AND RETAINED EARNINGS
(Unaudited)

|  | Thousands of Dollars Years Enacd Dccomber 31 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1973 | 1974 | 1975 | 1976 | 1977 |
| Revenues: |  |  |  |  |  |
| Royalties | \$ 25,278 | \$ 33,673 | \$ 35,496 | \$ 28,660 | \$ 39,038 |
| Products | 383,774 | 448,157 | 413,639 | 503,484 | 554,796 |
| Completed construction contracts | 176,902 | 278,114 | 142.228 | 116,230 | 98,811 |
| Englneering and operating services | 14,865 | 21,059 | 23.683 | 28,667 | 37,233 |
| Total revenues | 600.819 | 781.003 | 615.046 | 677,041 | 729,878 |
| Cost of sales and construction contracts | 488,735 | 647,054 | 485.929 | 528,217 | 553.627 |
| Gross profit | 112,084 | 133,949 | 129,117 | 149,824 | 166,251 |
| Selling and administratlve expenses | $(67,737)$ | $(80,256)$ | (85.246) | (86,854) | $(96,903)$ |
| Research and development expensos | $(19,826)$ | $(21,032)$ | $(27.487)$ | $(26,202)$ | $(28,592)$ |
| Interest expense | $(7,203)$ | $(8,621)$ | $(11,289)$ | (9,698) | $(6,422)$ |
| Writeolf of refinery company recelvable (Note 3) | - | - | $(34,391)$ | - |  |
| Other Income, net | 7,795 | 11,344 | 3,566 | 3,097 | 9,423 |
| Income (foss) from continuing operalions before income texes and extraordinary ltems .............................. | 25,113 | 35,384 | (25.730) | 29,167 | 41,757 |
| Provision for income taxes (Note 7) | 9,525 | 10,781 | 5,630 | 13.726 | 17,429 |
| Income (loss) from continuing operations before extraordlnary tiems | 15,588 | 24,503 | $(31,360)$ | 15,441 | 24,328 |
| Income (loss) from operations of the discontinued Fragrances Group (less applicable income taxes of $\$ 1,503$, $\$ 2,410, \$ 796$ credit and $\$ 617$ ) (Note 16) ................ | 2.540 | 3,149 | (3,508) | 1,181 | - |
| Income (loss) before extraordinary ltems | 18,128 | 27,752 | (34,868) | 16,622 | 24,328 |
| Extrsordinary ltems (Note 7) | 2,778 | - | - | 6,969 | 7,110 |
| Net Income (loss) | 20,906 | 27,752 | (34,868) | 23,591 | 31,439 |
| Retalned earnings, beginning of year | 44,911 | 63,322 | 84,088 | 41,809 | 62,817 |
| Dividends pald | ( 2,495 ) | (6,986) | (7.411) | $(2,583)$ | $(7,174)$ |
| Retained earnings, end of year | \$ 63.322 | \$84,088 | \$41.809 | \$ 62,817 | \$87,081 |
| Earnings per common share: |  |  |  |  |  |
| Continulng operations | \$1.56 | \$2.46 | \$(2.87) | \$1.35 | \$2.12 |
| Discontinued operations | . 25 | . 32 | (.32) | . 10 | - |
| Extraordinary liems | . 28 | - | - | . 61 | . 82 |
| Net Income (loss) . . . . . . . . . . . . . . . . . . . . . . . . . . . . | \$2.09 | \$2.78 | 5(3.19) | \$2.06 | 52.74 |
| Average shares outstanding (in thousands) ............... | 9,980 | 9,980 | 10,918 | 11.480 | 11,477 |
| Dividends pald per share | \$. 25 | \$.70 | \$.675 | \$.225 | \$.625 |

OTHER FINANCIAL DATA
(Unaudited)

| Total assets | \$380,803 | \$457,840 | \$455,544 | \$465,070 | \$508,263 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Working capital | \$ 90,250 | \$114,087 | \$ 91,849 | \$137,585 | \$162,829 |
| Plant and equipment, net | \$113,769 | \$139,205 | \$152,931 | \$144.626 | \$145,406 |
| Capital expenditures | S 19,721 | \$ 40,601 | \$ 29.577 | \$ 13,386 | \$ 16,292 |
| Depreciation and depletion provided | \$ 10,810 | \$ 11,274 | \$ 14,115 | \$ 13.818 | \$ 14,166 |
| Long-term debt | \$ 68,162 | S 92,904 | \$ 89.545 | \$ 89,382 | \$ 84,799 |
| Shareholders' equity-amount | \$173,173 | \$193,939 | \$182,689 | \$203,702 | \$227.914 |
| Shareholders' equity-per common share | \$ 17.35 | \$ 19.43 | \$ 15.91 | \$ 17.74 | + 19.86 |
| Number of common shares outstanding (in thousands) | 9,980 | 9,980 | 11,480 | 11.480 | 11,479 |
| Number of shareholder accounts | 24,497 | 25,721 | 23,825 | 21,709 | 19,349 |
| Number of employees | 12.162 | 11.281 | 11.038 | 10,767 | 11,603 |

The accompenying Notes to Consolldated Financial Statements are an Integral part of this statement.
Source: UOP's proxy statement dated May 5, 1978.

The defendants retained William Purcell of the New York investment firm of Dillon Reed who issued the following report:

## 46 William Street

# New Oonk10005 

April 29, 1980

The Signal Companies, Inc. 9665 Wilshire Boulevard Beverly Hills, California 90212

Dear Sirs:
You have requested us to review the financial terms and conditions relating to the merger (the "Merger") of UOP Inc. ("UOP") into and with a wholly-owned subsidiary of The Signal Companies, Inc. ("Signal") to determine whether, in our opinion, such terms and conditions were fair and equitable, from a financial point of view, to the holders of common stock of UOP other than Signal. In addition, you have requested that we advise you as to whether or not in our opinion, based upon our review of the information supplied to us by UOP and Signal in connection with our review of the financial terms and conditions of the Merger, the Proxy Statement dated May 5, 1978 of UOP (the "Proxy Statement"), as of its date, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading.

In undertaking our study and in arriving at our opinion as to the fairness of the terms and conditions of the Merger, we have reviewed information regarding UOP and Signal furnished to us by the management and special counsel of UOP and Signal, including, among other things, the financial statements and other data and information set forth in the Proxy Statement (including information relating to the substantial stock ownership by Signal and other interrelationships between UOP and Signal), the UOP annual reports for the period 1973-1977, documents filed by UOP with the Securities and Exchange Commission including its Form lo reports and its $10 Q$ report for the quarter
ended March 31, 1978, the Signal 1977 annual report, and other publicly available information and reports in our files. We also reviewed the general nature of the businesses conducted by UOP and the industries in which it operated, the historical market prices and trading volume of UOP's common stock, certain publicly available financial information and the historical market prices for securities of selected companies deemed by us to be somewhat comparable to UOP, the premium offered in relation to market price prior to the announcement of a consideration of the proposed Merger, and we have had discussions with certain members of UOP and Signal senior management with respect to UOP's businesses and prospects at the time of the Merger. We were advised that Signal management had no intention of transferring control of UOP at the time of the Merger.

We have reviewed various documents, papers and reports incorporated in the litigation file of Weinberger v. UOP Inc., et al, including depositions (and attached exhibits) taken of Messes. Glanville, Schwarzman, Seegal and Pearson of Lehman Brothers Kuhn Loeb Inc., Messes. Shumway, Walkup, Arledge, and Chitiea of Signal, Messrs. Crawford and Logan of UOP, Messes. Clements and Leno, non-management Directors of UOP, and Mr. Pizzitola of Lazard Freres \& Co.

We have not prepared or obtained any independent valuation or appraisal of the assets of UOP and we have, with your permission, assumed the accuracy and completeness of, and have relied on, the public and other information furfished to us by UOP and Signal and their management or filed by either company with regulatory authorities, without having made an independent investigation thereof.

As you know, Dillon Read has not received any fees in the past for investment banking services performed for either UOP or Signal. Dillon Read has represented buyers and selfless of more than one hundred businesses during the last ten years in acquisitions which had values ranging from under \$I million to over \$l billion. In 1979 alone, Dillon Read participated in more than 30 transactions either completed or publicly announced.

On the basis of the foregoing and considering factors we deemed relevant, including the information set forth below, it is our opinion that the offer of $\$ 21$ cash per share was fair and equitable from a financial point of view


#### Abstract

to the holders of common stock of UOP other than Signal. Also, in the course of our review of the Proxy Statement and other materials supplied to us by UOP and Signal for the purpose of rendering the foregoing opinion, nothing came to our attention which caused us to believe that the Proxy Statement as of its date contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading, or failed to provide holders of common stock of UOP with sufficient information to make an informed decision with respect to the proposed Merger.


There are different ways to arrive at the concept of fair value in any transaction. The weight assigned to each of the factors analyzed will vary according to the facts of a particular case. In our study, we concentrated most heavily on the market value of the UOP shares, the investment value of the UOP shares, and the structure of the transaction. We also considered the asset value of UOP, but on the basis of a "going concern" and not as one being liquidated. Set forth below are certain comments and conclusions which entered into our opinion, and which should be read in conjunction with the exhibits attached hereto as Tabs 1 through 8.
(A) Market Value:

In the free market system of the United States, the value of many tangible items, including securities, is determined by the judgement of independent willing buyers and sellers, each with knowledge of the applicable transaction and neither forced to act. Regarding the value of widely owned common stock securities, the national market system, especially The New York Stock Exchange, provides a free, open and liquid market and one that is generally very efficient in establishing value.

UOP, at the time of its 1978 Proxy Statement, had 11,488,302 common shares outstanding, of which $5,688,302$ or $49.5 \%$ of the total were owned by shareholders other than Signal. The shares were actively traded on The New York Stock Exchange and, at year end 1977, there were approximately 19,300 shareholders of record. Exhibit l sets forth information about the trading prices and volume of UOP's common stock from 1974 through May 26 , 1978. As can be seen, in 1974 HOP's common stock traded over 4.2 million shares, or about $42.7 \%$ of the then outstanding total, at prices ranging between a high of $\$ 18.75$ and a low of $\$ 9.75$, closing the year at $\$ 11.25$. In 1975, prior to the announcement on April 18 of Signal's tender offer, UOP's common stock traded between $\$ 15$ and $\$ 11.25$, closing on April 18 at $\$ 13.875$. During the tender offer, the UOP common stock traded between \$17 and \$18. On May 5, after the expiration of the tender offer, the common stock immediately dropped to $\$ 13.75$ and for the remainder of the year traded between $\$ 16.25$ and $\$ 9.50$, closing the year at $\$ 10.125$. Volume in 1975 was over 5.4 million shares. In 1976 and 1977, even though Signal owned $50.5 \%$ of UOP's common shares, annual trading volume exceeded 2.6 million shares in each year. In 1976, the stock traded between $\$ 15.75$ and $\$ 10$, closing the year at $\$ 14.625$. In 1977, the stock traded between \$18.625 and $\$ 13.50$, closing the year at $\$ 15.50$. In 1978, prior to the announcement on March 1 that UOP and Signal were conducting merger negotiations, the stock traded between \$15.875 and \$14, closing on February 28 at \$14.50.

In summary, the high price for UOP common stock for the five calendar years $1974-1978$ was $\$ 18.75$ reached in 1974. Excluding the trading prices achieved during the 1975 Signal tender offer, the stock did not trade above \$16.25 in 1975 nor above $\$ 15.75$ in 1976. In 1977, it traded above $\$ 18$ again for a period of two days to a high of $\$ 18.625$, but in 1978 did not trade above $\$ 15.875$ prior to Signal's merger offer. In terms of average prices, the average high price adding each of the five years was $\$ 17.05$, the average low price was $\$ 11.35$, and the average closing price was $\$ 13.20$. The average of the high-low-close prices was $\$ 13.87$. Thus, the fair market value for UOP common stock was approximately $\$ 14$ per share, very close to UOP's closing price of $\$ 14.50$ on February 28, 1978, the last trading day prior to the announcement of UOP and Signal merger negotiations.
(B) Structure of Transaction:

By structure of the transaction, we mean the mechanism and procedures established which enable shareholders to meaningfully vote on a proposal. Just as we discussed previously the importance of a free and open market in establishing fair value, from the point of view of a company's shareholders, one important indication of their opinion regarding the fairness and adequacy of a transaction is the active response taken to that transaction or proposed transaction. In the case of a tender offer, shareholders' opinion is expressed by the decision to sell their common shares at the tender price or to hold them. In the case of a proposed merger, shareholders' opinion is expressed through the ballot box, in that they consciously vote in favor of the merger or against it after reading the applicable proxy statement.

UOP's shareholders, by their actions, seemed to express an overwhelming consensus that $\$ 21$ per share was an attractive price at which to sell their common shares. First, at the May 26, 1978 Annual Meeting of Stockholders, $92.1 \%$ of the shares represented at the Meeting (excluding those owned by Signal) voted in favor of the proposed merger with Signal at a cash price of $\$ 21$ per share.* Second, during April and May of 1975, in response to Signal's then current tender offer also at $\$ 21$ per share, $78.2 \%$ of all UOP common shares then outstanding were tendered although Signal specifically stated that it would purchase only $43 \%$ of the outstanding shares. As a result, Signal purchased on a pro reva basis only $55 \%$ of the shares tendered and returned

[^0]the remaining shares to stockholders. $* *$ As previously stated, the UOP shares immediately dropped to \$13.75 after the expiration of this tender offer.

In connection with UOP shareholders being able to render a meaningful vote on the proposed merger transaction, it appears that Signal and UOP management made an excellent effort to encourage shareholders to vote and to emphasize the importance of their vote. Although Delaware law (UOP's state of incorporation) required only the affirmative vote of at least a majority of the outstanding shares of UOP common stock entitled to vote at the Meeting for consummation of the merger, the Merger Agreement provied that:
(i) Final approval required the affirmative vote of the holders of a majority of the shares, other than those owned by Signal, present and voting at the Annual Meeting of Stockholders, and
(ii). Final approval required no fewer than two-thirds of all outstanding shares entitled to vote on the matter, including shares owned by Signal.

Thus, although Signal by itself had enough votes through its share ownership to consummate the Merger under Delaware law, management (both Signal and UOP) provided the other shareholders of UOP the opportunity to control their own destiny by voting in favor of the merger or opposing it. Management also provided the other UOP shareholders the incentive to vote by insisting on a total in-favor vote of at least two-thirds of total outstanding shares, in that a very small shareholder turnout in itself could defeat the merger since Signal had only $50.5 \%$ of the votes
** Regarding the April-May 1975 tender offer, there were then $9,980,000$ UOP common shares outstanding. Signal announced a tender offer for 4.3 million shares or $43.1 \%$ of the total outstanding, and received tenders for 7.8 million shares or $78.2 \%$ of the total outstanding. Signal purchased $55 \%$ of the shares tendered and returned 3.5 million shares to stockholders. Signal also purchased 1.5 million newly issued UOP shares so that its total ownership became 5.8 million shares or $50.5 \%$ of the total then outstanding.
by itself. Finally, UOP management ensured that as many shareholders as possible received the Proxy Statement and were informed of the Annual Meeting date by retaining a proxy solicitation firm to provide such services.

## (C) Investment Value:

The investment value of the UOP common shares is a function of many items, including UOP's financial position, its earnings and dividend growth and the consistency of that growth, the nature of its businesses, and its future prospacts. Exhibits 2 A through 2D set forth information regarding UOP's balance sheet and capital structure from 1973 to March 31, 1978, UOP's income statement from 1972 through the first quarter of 1978, and UOP's Sources and Uses of Funds from 1973 through 1977 . Exhibits $3 A$ and $3 B$ set forth various statistical growth rates and product line breakdowns from the above data.
(i) Balance Sheet and Capitalization Data: During the five year period 1973-1977, UOP's capitalization became more leveraged during 1974 and 1975 and then improved during 1976 and 1977 so that total debt as a percent of capitalization was $28.1 \%$ at year-end 1977 versus $34.2 \%$ at year-end 1973 (the highest debt period being $42.0 \%$ at year-end 1975). Also, by year-end 1977 UOP's total debt structure had less short term debt than in the 1973-1975 period. UOP's equity actually declined in 1975 because of the $\$ 35$ million net loss in that year, but was cushioned somewhat by the effect of Signal purchasing 1.5 million new common shares during the first half of that year.
Refer to Exhibit 2A.
UOP's working capital (excluding short term debt and current maturities of long term debt) grew in absolute dollars during the 1973-1977 period but stayed reasonably consistent in terms of its relationship to total revenues, being $21.6 \%$ of revenues at year-end 1974 and $23.4 \%$ of revenues at year-end 1977. Regarding cash and equivalents, although cash as a percent of total net assets hit a high point of $22.1 \%$ at year-end 1977, by the end of the first quarter of 1978 it had fallen to a percentage equivalent to year-end 1973 , i.e., $13.2 \%$ versus $14.0 \%$. Refer to Exhibit 2A.

In terms of liabilities not on the balance sheet, UOP had a significant contingent liability at year-end 1977 in the form of pending litigation. Plaintiffs claimed damages of approximately $\$ 200$ million in such litigation. Although management and the vice president-general counsel of UOP were of the opinion that the litigation could be successfully defended and that in any event the ultimate liability, if any, resulting therefrom would not materially adversely affect UOP's financial position on a consolidated basis, Arthur Andersen \& Co. in its 1977 UOP Auditors' Report stated the above qualification. In addition, since UOP represented $24 \%$ of Signal's consolidated total assets, $23 \%$ of Signal's consolidated sales, and $11 \%$ of Signal's consolidated net income for 1977, Haskins \& Sells also qualified Signal's 1977 audited financial statements as to the above mentioned potential litigation liability. Because of management's opinion that the litigation could be successfully defended and that the ultimate liability, if any, would not be material, we have not discounted our valuation of UOP common stock pursuant to this contingent liability. Since a qualified audited financial statement is usually of concern to financial analysts, some people might argue that a discount should be applied. In any case, the existence of the litigation and the magnitude of the claimed damages, as well as the reported net loss in 1975, demonstrate the riskiness and volatility of UOP's construction business.
(ii) UOP Lines of Business: As of the beginning of 1978, UOP was a diversified industrial company engaged in six major lines of business. These lines of business are listed below with the percent contribution of each line of business to consolidated total revenues and consolidated operating profit (income from continuing operations before corporate overhead items, income taxes and extraordinary items). Refer also to Exhibit 3A. As can be seen, UOP's lines of business were quite diversified and were not concentrated in any one product area or area of expertise. As a result, it would be very difficult to classify UOP as a company in any one industry category, and indeed Standard $\&$ Poor's Corporation in its Industry Surveys did not list UOP in its service as of the end of 1977 despite the fact of its relatively large size.
Total Revenues
Petroleum and petrochemical
Construction
Fabricated metal products
Transportation equipment
Chemicals and plastics
Other products
Total

Operating Profit.
Petroleum and petrochemical Construction
Fabricated metal products
Transportation equipment
Chemicals and plastics
Other products
Total

Operating Profit (Excluding
Construction and Other Products)

Petroleum and petrochemical
Fabricated metal products
Transportation equipment
Chemicals and plastics SubTotal



In terms of revenues, the contribution from each line of business stayed reasonably consistent during the five year period 1973-1977 with the exception of Construction, which fell almost one-third from $31.4 \%$ of revenues to $21.2 \%$, and Transportation Equipment which almost doubled from 8.4\% of revenues to $15.8 \%$. Petroleum and Petrochemical grew slightly as a percent of the total during the period, Fabricated Metal Products fell slightly, and Chemicals and Plastics grew rather strongly.

In terms of operating profit, there were some wide swings in percent contribution. Petroleum and Petrochemical grew in importance versus all lines of business but stayed about
even when compared with the four most profitable lines. In terms of absolute dollars (refer to Exhibits $3 A$ and $3 B$ ), operating profit increased each year except for a very small decline in 1975. Construction was very erratic, having operating losses in both 1974 and 1975 and fairly low profits in the other years. Fabricated Metal Products declined in profit importance versus all lines of business and as compared with the four most profitable lines. Operating profit in dollars increased in 1974, but decline in both 1975 and 1976 before increasing in 1977. The 1977 dollar profit, however, was no higher than that achieved in 1973. Transportation Equipment grew in impportance in a very dramatic way, but also in a very volatile way. From an operating loss in 1973, the 1976 profit increased over $400 \%$ versus 1975 but then declined $25 \%$ in 1977. The 1977 level of profit, however, was still far above that achieved in 1973-1975. Chemicals and Plastics declined in importance by 1977 versus 1973 but not dramatically. However, the year-to-year dollar changes were very dramatic, showing either large increases or large declines almost every year. Other Products declined in importance and generated operating losses for three consecutive years, 1975-1977.

In terms of identifiable assets, reference is made to Exhibit 3B. As can be seen, there were no major changes in each line of business percent contribution to assets during the 1973-1977 period. At year-end 1977, Petroleum and Petrochemical had $22.9 \%$ of identifiable assets, Construction had $20.2 \%$ (down only from $22.8 \%$ at year-end 1974 despite the poor operating performance of this line of business), Fabricated Metal Products had 23.7\%, Transportation Equipment had $15.8 \%$, Chemicals and Plastics had $12.5 \%$ and Other Products had 5.0\%.
(iii) Consolidated Operating Record: On a consolidated basis, UOP had an erratic and not overly impressive operating record for the five year period 1973-1977. Earnings per share were not only volatile but were composed of items from discontinued operations and/or extraordinary items in most years. Revenues did not grow consistently and both margins and return on equity were below average.

The following table sets forth UOP's earnings per share, and reference is also made to Exhibit 2B.

|  | Earnings Per Share |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Continuing <br> Operations | Discontinued <br> Operations | Extraordinary <br> Items | Income |  |
|  |  |  |  | (Loss) |  |

On the basis of both continuing operations and total net income, UOP achieved its best performance for the year 1974. Since that time, a loss was incurred in 1975 and, despite improved earnings in 1976 and 1977, earnings per share at yearend 1977 were below those of 1974. On the basis of continuing operations, earnings per share in 1977 were $13.8 \%$ below 1974 and on the basis of total net income were $1.4 \%$ below 1974. In terms of average earnings per share from continuing operations for the five year period, if the 1975 loss year is counted as breakeven, then average earnings would be \$1.50. If the 1975 loss year were eliminated so that a four year average was used, then average earnings would be \$1.87.

In terms of profit margins, UOP's income from continuing operations before extraordinary items was $2.6 \%$ of revenues in 1973, $3.2 \%$ in 1974, a loss in 1975, 2.3\% in 1976 and $3.3 \%$ in 1977. Excluding the loss year of 1975, the four year average profit margin would be $2.85 \%$. As can be seen from Exhibits $5 A$ and $5 B$, most of the companies deemed to be somewhat comparable to UOP had a 1977 profit margin higher than UOP and on average, as a group, had a net profit margin of about $4 \%$.

In terms of return on average equity, UOP's income from continuing operations before extraordinary items as a percent of average shareholders'equity was $9.0 \%$ in 1973, 13.4\% in 1974, negative in 1975, 8.0\% in 1976 and $11.3 \%$ in 1977. Excluding the loss year of 1975, the four year average return on equity would be $10.4 \%$. As can be seen from Exhibits 5 A and 5B, the somewhat comparable companies had a 1977 return on equity averaging about $14.5 \%-15 \%$, well above UOP's 1977 return of $11.3 \%$.
(iv) Stability and Consistency of Earnings: As discussed previously, UOP's consolidated earnings and earnings per share were generally erratic during the 1973-1977 period. Moreover, this lack of earnings consistency was not attributable to just one line of business. Although Construction was clearly the most erratic profit performer, all of UOP's lines of business had at least one down year in operating profit performance during the five year period. Petroleum and Petrochemical was the most consistent and stable line of business with operating profits down only once, in 1975 by $3.5 \%$. In 1976 operating profit increased $14.3 \%$ and in 1977 by 8.8\%. Refer to Exhibit 3A. Fabricated Metal Produts had two down years, with operating profit down 13.3\% in 1975 and down $31.8 \%$ in 1976. In 1977 profit increased $34.1 \%$. Transportation Equipment had a loss in 1973, low profits in 1974 and 1975, a dramatic leap in profits in 1976 (up over $400 \%$ ), and a down year in 1977 (down $25.8 \%$ ). Chemicals and Plastics had a loss in 1975, a poor year in 1976, and a $270 \%$ increase in 1977 but at a level still below the profit performance of 1974. Other Products had profitable years in 1973 and 1974 and then three consecutive loss years for 1975-1977. As can be seen from Exhibit 3A, the operating profits as a percent of revenues and as a percent of identifiable assets were also quite erratic for the different lines of business. To quote Value Line's analyst report on UOP dated February 24, 1978: "We caution, however, that the company ranks near the bottom in Earnings Predictability, so our 3 to 5 year projection is perforce tentative. The difficulty of earnings estimation is inherent in the company's business." Value Line graded UOP's financial strength as $C++$ (A+ being the highest ranking) and its Safety rating as 3 (1 being the highest and 5 the lowest).
(v) Dividend Growth and Consistency: Exhibit 4 sets forth the history of UOP's quarterly dividend declarations from 1970 through the first quarter of 1978. The record is extremely erratic and shows both dividend cuts and complete omissions. In fact, UOP completely eliminated its quarterly dividend payments on two occasions since 1971, whereas Exhibit 4 shows that only a very small percentage of companies had taken such action during the 1971-1978 period. From an investor's point of view, there are very few more important investment criteria than the growth and consistency of quarterly and annual dividend payments. Indeed,

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the elimination of the dividend can lead to a common stock being removed from many institutional legal investment lists. On an annual basis, the UOP shareholder either received no dividend increase or an actual lower dollar dividend payout in five of the eight years from 1970 through 1977. Even though the quarterly dividend rate was increased five times beginning in the third quarter of 1976 through the first quarter of 1978 , the annualized rate of $\$ 0.80$ per share as of the first quarter of 1978 was still only equal to the annual dividend paid in 1970 of $\$ 0.80$ per share.
(vi) Estimated Future Earrings of UOP: As previously pointed out, the nature of UOP's lines of business made earnings forecasts very difficult. Management did prepare annual budgets and forecasts, however, as a matter of policy and the fiscal 1978 projected budget was disclosed in the Proxy Statement. It estimated 1978 earnings per share from continuing operations before extraordinary items at $\$ 2.62$, up $23.6 \%$ from 1977 results and $6.5 \%$ above UOP's previous best results of $\$ 2.46$ per share in 1974. Including estimated extraordinary tax credit items, earnings per share were estimated at $\$ 2.86$, $4.4 \%$ above the 1977 results of $\$ 2.74$ per share including extraordinary items. As a matter of interest and confirming the difficulty of accurately projecting UOP's results, actual fiscal 1978 results of UOP from continuing operations (reported by UOP and Signal management in 1979) were about $10 \%$ lower than estimated in the Proxy Statement. In other words, actual 1978 UOP income from continuing operations was $\$ 27,162,000$ or equivalent to $\$ 2.37$ per UOP share outstanding (using end of 1977 actual UOP shares then outstanding), up only $11.8 \%$ from 1977 results from continuing operations versus the Proxy Statement forecast of being up $23.6 \%$. It is also interesting to note that, upon review of UOP's internal five year plans dated April 27, 1977 and April 28, 1978, the estimated net income for the years 1978 and 1979 was projected at lower levels in the April 1978 plan than in the April 1977 plan. Also, the level of projected capital expenditures had been raised for both years in the April 1978 plan.
(vii) Capitalization of Earnings or Earnings Multiplier: Reference is made to Exhibits 5 A and 5 B which list companies that compete with UOP in some of its product lines and companies that are general diversified industrial companies. As discussed previously, UOP's lines of business are quite
diverse and no single line of business dominates either its revenues or operating profits. Thus, no meaningful direct analysis of companies comparable to UOP can be made. However, analyzing the investment values of the companies in Exhibits $5 A$ and $5 B$ which have been deemed to be at least somewhat comparable to UOP is useful as a guide.

As can be seen from Exhibit 5A, the average price earnings ratio as of March 1 , 1978 for 15 selected companies which compete with UOP in some of its product lines was 7.2 times, and the median price earnings ratio was 7.4 times fiscal 1977 earnings per share. The common stocks of these companties were selling in the market at an average of $112 \%$ of book value, with the median being $94 \%$ of book value. The median is often a more meaningful number. than the average in that a few abnormally high or low values do not cause as great a distorting effect. For example, regarding the market to book value statistics of the companies on Exhibit 5A, engineering and construction companies such as Foster Wheeler and Fluor have historically sold at a large premium over book value because of their being so non-capital intensive, and averaging their ratios into the entire group could have a distorting effect on the group average.

As can be seen from Exhibit 5B, the average price earnings ratio as of March 1 , 1978 for 39 selected diversified industrial companies was 6.6 times, and the median price earnings ratio was 6.4 times fiscal 1977 earnings per share. The common stocks of these companies were selling in the market at an average of $77 \%$ of book value, with the median being $67 \%$ of book value. In terms of earnings per share growth for the 1973-1977 period, net margins for 1977 and return on equity for 1977, most of the companies on both Exhibits 5A and 5 B had a better record than UOP. Specifically, UOP's earnings per share from continuing operations at year-end 1977 were still below that of 1974 whereas the companies on Exhibit 5A had a five year growth rate in earnings per share averaging $21.3 \%$ (median being $14.5 \%$ ) and the companies on Exhibit $5 B$ averaged $17.1 \%$ (median being $13.2 \%$ ). UOP's 1977 return on equity was $11.3 \%$ whereas the companies on Exhibit 5A had a 1977 average return on equity of $16.0 \%$ (median $15.4 \%$ ) and the companies on Exhibit 5B averaged $14.5 \%$ (median $14.6 \%$ ). UOP's 1977 net margin was $3.3 \%$ whereas the companies on Exhibit 5 A had a 1977 average net margin of $4.4 \%$ (median $3.8 \%$ ) and the companies on Exhibit $5 B$ averaged $4.0 \%$ (median $3.6 \%$ ).

In terms of general market statistics, Exhibit 5C demonstrates that $72 \%$ of all companies listed on The New York Stock Exchange as of March 1, 1978 then sold at a price earnings multiple of less than 8 times, with $44 \%$ of the companies selling at less than 6 times earnings. Regarding the Standard \& Poor's 400 Industrial Companies, $66 \%$ were selling at less than 8 times earnings as of March 1 , 1978. At the March 1, 1978 date, the Dow Jones Industrial Average and the Standard \& Poor's Industrial Average both were at 8.3 times earnings of their composite companies. As for the relationship of market price to book value as of March 1, 1978, Exhibit 5C shows that $67 \%$ of all companies listed on The New York Stock Exchange were selling at less than book value, with $44 \%$ of the companies selling at less than $80 \%$ of book value. Regarding the Standard $\&$ Poor's 400 Industrial Companies, $59 \%$ were selling under book value. The Dow Jones Industrial Average companies were selling at $88 \%$ of book value as a group and the Standard \& Poor's Industrial Average companies were sellling at $117 \%$ of book value as a group.
(viii) Investment Value of UOP Common Shares: Based on the above comments and statistics, the investment value of UOP common stock as of March 1 , 1978 was probably in the range of 6.5 to 7.0 times fiscal 1977 earnings per share from continuing operations and/or in the range of $80 \%-85 \%$ of fiscal 1977 book value. Based on fiscal 1977 earnings per share from continuing operations of $\$ 2.12$ and year-end 1977 book value per share of $\$ 19.86$, the above price earnings range would translate into a dollar value range of $\$ 13.78-\$ 14.84$ per share ( $\$ 14.31$ average), and the above book value range into a dollar value range of \$15.89-\$16.88 per share (\$16.39 average). Taking the average of the price earnings evaluation and the book value evaluation gives an investment value per UOP common share of $\$ 15.35$.
(D) Net Asset Value:

The net asset value or book value per UOP common share was $\$ 19.86$ at year-end 1977 and $\$ 20.69$ as of March 31, 1978. Book value is often used as a parameter of possible liquidaLion value, but is of much less importance than market value and investment value criteria when evaluating a going concern.

We were advised that neither Signal nor UOP management had any intention of liquidating UOP's assets and, accordingly, we believe that little weight should be given to book value or net asset value in attempting to evaluate the common shares of UOP. The concept of book value is also useful in terms of studying a company's asset structure. Some companies have assets on their books at a very low cost basis or almost completely depreciated which have a present value far above their stated values (for example, mineral properties or securities carried at cost versus market value). In such a case, the investment value of a company could be affected by a more thorough analysis of such assets.

Most of UOP's stated assets were industrial type assets employed in its five primary lines of business. Refer to Exhibit $3 B$ for information regarding identifiable assets by line of business.

Since the Petroleum and Petrochemical line of business is one of UOP's more important lines of business and also one of its most consistent in terms of operating profit performance, some comment should probably be made regarding the value of UOP's patents, which were listed on the December 31, 1977 balance sheet at $\$ 2.3$ million. UOP at year-end 1977 had more than $3,045 \mathrm{U} . \mathrm{S}$. and 6,032 foreign patents from more than 100 countries. Since research and development expenses are written off as expenses each year and are not capitalized according to generally accepted accounting principles, patents do not accumulate high balance sheet asset values as do plant and equipment. In any event, the real value of patents (as for most other assets) is the ability to generate revenue. Set forth below is a table which compares for the five year period 1973-1977 UOP's annual expenditures on research and development with the annual revenue stream generated from royalties (some of which but not all derives from UOP patents).


If it is argued that a certain level of annual research and development expenditures is needed to continue the generation of royalty revenue, then the third column above could be interpreted as the annual return or gross profit on the investment of research and development. As can be seen, this return has been positive every year but certainly has not grown in a consistent pattern. In any case, the bottom line effect of royalty income is part of UOP's consolidated net income, which as a whole has been one of the important determinants of UOP's investment value.

## (E) Adequacy of $\$ 21$ Per Share Merger Terms:

The Merger Agreement between Signal and UOP stated that UOP would become a wholly-owned subsidiary of Signal and that each share of UOP common stock held by stockholders other than Signal would become a right to receive $\$ 21$ cash. At this amount, UOP was valued at 9.9 times fiscal 1977 earnings from continuing operations, 11.2 times average earnings for the 1973-1977 period (excluding the loss year of 1975), 14.0 times average earnings (including 1975 as a breakeven year), and at $105.7 \%$ of year-end 1977 book value ( $101.5 \%$ of March 31 , 1978 book value). In addition, the price of $\$ 21$ per share represented a market value premium of $44.8 \%$ over the closing price of the common shares just prior to the announcement of negotiations.

In summary, on the basis of all the information set forth herein and considering factors we deemed relevant, it is our opinion that the offer of $\$ 21$ in cash per share was fair and equitable from a financial point of view to the holders of common stock of UOP other than Signal.

## (F) Requirement For Market Value Premium:

In merger and tender offer transactions, a premium is generally paid over market price. The magnitude of the premium, if any, is a function of many considerations including, among other things, the valuation presently given to a company's common stock in the marketplace and whether or not a control position is being sought through the transaction. For example, a higher premium will usually be involved when a company's stock is undervalued in the marketplace as compared to being fully valued. Likewise, a higher premium will usually be involved when controd is being sought, especially if more than one party is seeking control at that point of time.

Reference is made to Exhibits 6 and 7. Exhibit 6 lists selected mergers and acquisitions of industrial companies (excluding financial, insurance and railroad transactions, etc.) which were valued at no less than $\$ 50$ million and for which price terms were announced during 1977 and through May 1978. As can be seen, the magnitude of market value premiums varied widely, getting close to $100 \%$ in certain contested-competitive situations such as the acquisition of Carborundum by Kennecott ( $98 \%$ premium) and certain purchases by major foreign corporations such as the acquisition of Miles Laboratories by Bayer AG ( $86 \%$ premium). Taking all of the merger transactions in Exhibit 6 as a group, the average market value premium was $48 \%$ and the median premium was $41 \%$.

Exhibit 7 lists selected mergers and acquisitions of industrial companies in which the acquiring company had an already existing control position of at least a $30 \%$ stock ownership. As can be seen from this exhibit, the market value premiums did not vary as widely as those from Exhibit 6 and they were generally somewhat lower, averaging $35 \%$ as a group (median being $32 \%$ ).

Regarding the merger terms in the UOP transaction, as discussed previously the $\$ 21$ per share price represented a market value premium of $44.8 \%$. This premium was almost as large as the market value premium of $51.4 \%$ that Signal offered in its April 1975 tender offer to gain $50.5 \%$ control of UOP. Although an analysis of the 1975 tender offer was not of major importance in opining on the fairness and adequacy of the 1978 Merger terms, it is our observation that the 1975 offer seemed to place a floor on the terms of the Merger rather than a ceiling. The operating performance of UOP as a company and the financial performance of its stock during the 1975 -first quarter 1978 period might have warranted merger terms less attractive than $\$ 21$ per share. However, because so many shareholders tendered their stock at $\$ 21$ per share in 1975, with Signal purchasing only $55 \%$ of the tendered shares and returning the rest, and since Signal was now a control shareholder, the value of $\$ 21$ per share seemed to present a psychological level that the parties involved did not want to violate.

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(G) Information Regarding Signal:

Exhibit 8 sets forth selected financial information on Signal. As shown on that Exhibit and as discussed previously, UOP represented over 11\% of Signal's 1977 consolidated net income and, pro form for the Merger of UOP into Signal, this contribution would increase to about $20 \%$ of Signal's 1977 consolidated net income. In terms of Signal's consolidated revenues and identifiable assets, UOP contributed about $25 \%$ of each category. Since Signal's common stock closed at $\$ 28.50$ on March 1 , 1978 and UOP's stock rose to approximately $\$ 20$ after the announcement of merger negotiations, any shareholder of UOP who wished to continue to participate in UOP's future in some fashion could have done so by selling his UOP stock in the market and purchasing Signal stock. Since Signal's 1977 earnings per share were $\$ 5.13$, its stock at a value of approximately \$30 per share in early March 1978 had a price earnings ratio of about 5.8 times. Since UOP shareholders were being bought out at 9.9 times 1977 earnings per share, they could have afforded to pay a capital gains tax as high as $40 \%$ of the merger price and still have ended up with the same equivalent earnings per share in Signal as they previously had in UOP. For example, if a $40 \%$ tax were paid on the $\$ 21$ merger price, the net proceeds to a shareholder would have been $\$ 12.60$. This amount could have purchased 0.42 shares of Signal at a price of $\$ 30$ per share. That many shares of Signal would represent earnings per share of $\$ 2.15$ since Signal's 1977 earnings were $\$ 5.13$. This amount would compare with UOP's 1977 earnings per share from continuing operations of $\$ 2.12$. Since most UOP shareholders probably had a tax liability less than $40 \%$, they could have ended up better than the above figures if they so desired.

Very truly yours,
DILLON, READ \& CO. INC.

By


## Dillon, Mhead\%Co. In e.

## SIGNAL-UOP

## INDEX TO EXHIBITS

## EXHIBIT 1

1 : UOP Common Stock Price and Volume Data, 1974 to May, 1978.

## EXHIBIT 2

2A: UOP Balance Sheet and Capitalization Data, 1973 to March 31, 1978.

2B: UOP Income Statement Data, 1972 to 1977.
2C: UOP Income Statement Data: First Quarter 1977 and 1978.

2D: UOP Sources and Uses of Funds, 1973 to 1977.

## EXHIBIT 3

3A: Growth and Operating Data by UOP Industry Segment, 1973 to 1977.

3B: UOP Summary of Operations by Industry Segment, 1973 to 1977.

## EXHIBIT 4

4 : UOP Quarterly Dividend History 1970 Through First Quarter 1978.

## EXHIBIT 5

5A: Comparison of Market and Operating Data for Selected Competitors of UOP.

5B: Comparison of Market and Operating Data for Selected Diversified Industrial Companies.

5C: General Market Statistics: Price/Earnings Ratios and Market/Book Value Ratios at March l, 1978.

Dillon, Read r Co. Inc.

INDEX TO EXHIBITS (cont'd)

EXHIBIT 6
6 : Mergers and Acquisition Offers for Selected Industrial Companies Valued at $\$ 50$ Million or More, 1977 Through May, 1978.

## EXHIBIT 7

7 : Summary of Selected Acquisitions Where the Acquiror Owned a Minimum of $30 \%$ of the Acquired Prior to Making an Offer for All or Part of the Remaining Shares, 1975 Through May, 1978.

## EXHIBIT 8

8 : Selected Financial Information on Signal Cos. Inc.

UOP Common stock Price and Volume Data, 1974 to May 26, 1978

L_High Low $\quad$ Close $\quad$| Volume as \% |
| :---: |
| of Average |
| Shares |

Annual
1974
1975

1976
1977
1978
$\frac{\text { Month1 }}{197}$
1977
January
February
March
April
May
June
July
August
September
October
November
December
1978
January
$\frac{\text { Daily }}{1978}$
February
1
2
3
6
7
7
8
9
10
13
14
15
16
17
20
21
22
23
24
27
$28(4)$

|  | March | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 6(5) \\ & 7 \\ & 8 \\ & 9 \\ & 10 \end{aligned}$ |
| :---: | :---: | :---: |
| 1 | $\frac{\text { Weekly }}{\text { February }}$ | $\begin{aligned} & 17 \\ & 23 \\ & 31 \end{aligned}$ |
|  | April | $\begin{array}{r} 7 \\ 14 \\ 21 \\ 28 \end{array}$ |
|  | May | $\begin{aligned} & 5 \\ & 12 \\ & 19 \\ & 26(6) \end{aligned}$ |


|  | March | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 6(5) \\ & 7 \\ & 8 \\ & 9 \\ & 10 \end{aligned}$ |
| :---: | :---: | :---: |
| 1 | $\frac{\text { Weekly }}{\text { February }}$ | $\begin{aligned} & 17 \\ & 23 \\ & 31 \end{aligned}$ |
|  | April | $\begin{array}{r} 7 \\ 14 \\ 21 \\ 28 \end{array}$ |
|  | May | $\begin{aligned} & 5 \\ & 12 \\ & 19 \\ & 26(6) \end{aligned}$ |


| $183 / 4$ | $93 / 4$ |
| :--- | :--- |
| $18(2)$ | $91 / 2$ |
| $153 / 4$ | 10 |
| $185 / 8$ | $131 / 2$ |
| $21(3)$ | 14 |


| $111 / 4$ | $4,263,300$ |
| :--- | :--- |
| $101 / 8$ | $5,423,700$ |
| $145 / 8$ | $2,674,500$ |
| $151 / 2$ | $2,615,800$ |
| 21 | $1,337,300$ |

42.7
49.7
23.3
22.8

February $\begin{array}{ll}15 & 1 / 4 \\ 14 & 7 / 8 \\ 14 & 7 / 8 \\ 15 & 1 / 8 \\ 15 & 5 / 8 \\ 15 & 1 / 8 \\ 15 & 3 / \\ 15 & 7 / 8 \\ 15 & 1 / 4 \\ 15 & 1 / 4 \\ 14 & 5 / 8 \\ 15 & \\ 14 & 3 / 4 \\ 14 & 5 / 8 \\ 14 & 5 \\ 15 & 7 / 8 \\ 14 & 7 / 8 \\ 14 & 3 / 4\end{array}$
$\begin{array}{ll}16 & \\ 17 & 3 / 4 \\ 15 & 3 / 8 \\ 16 & 1 / 2 \\ 17 & \\ 18 & 5 / 8 \\ 17 & 3 / 4 \\ 16 & 3 / 8 \\ 16 & \\ 15 & 1 / 8 \\ 15 & 3 / 4 \\ 15 & 7 / 8\end{array}$

| 14 | $1 / 4$ |
| :--- | :--- |
| 14 |  |
| 14 |  |
| 13 | $7 / 8$ |
| 15 | $1 / 8$ |
| 15 | $1 / 4$ |
| 16 |  |
| 15 | $1 / 8$ |
| 14 | $3 / 8$ |
| 13 | $5 / 8$ |
| 13 | $1 / 2$ |
| 14 | $1 / 4$ |


| 15 | $5 / 8$ |
| :--- | ---: |
| $143 / 4$ | 285,800 |
| $141 / 2$ | 182,300 |
| $163 / 8$ | 255,300 |
| $153 / 4$ | 228,500 |
| $171 / 2$ | 329,300 |
| $161 / 8$ | 112,100 |
| $151 / 2$ | 82,500 |
| $143 / 4$ | 89,800 |
| 14 |  |
| $153 / 8$ | 154,400 |
| $151 / 2$ | 123,000 |

$153 / 4$
14
$145 / 8$
34,800

$\frac{\text { Votes: }}{(1)}$
(1) The average shares outstanding were as follows ( 000 's): $1974-9,980 ; 1975-10,918 ; 1976-11,480 ; 1977-11$,
(3) Prior to Signal's tender offer the high price for the year was $\$ 157 / 8$.
(4) Last trading day prior to the announcement of the proposed merger with Signal. Trading halted on March 1.
(5) UOP Directors vote to accept Signal offer.
(6) Date of the shareholder vote and the last day UOP common was traded.

UOP Balance Sheet and Capitalization Data, 1973 to March 31, 1978 (Dollars in thousands; years ended December 31)

| Net Assets | 1973 |  | 1974 |  | 1975 |  | 1976 |  | 1977 |  | $\begin{gathered} \text { March 31 } \\ \hline 1978 \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash and equivalents | \$ 36,760 | 14.0\% | \$ 25,228 | 7.77 | \$ 23,779 | 7.5\% | \$ 53,952 | 17.6\% | \$ 72,978 | 22.1\% | \$ 46,663 | 13.27 |
| Receivables (net) | 97,406 | 37.0 | 128,077 | 39.0 | 132,428 | 41.6 | 134,899 | 43.9 | 138,917 | 42.1 | 171,798 | 48.5 |
| Inventories (1) | 75,545 | 28.7 | 110,405 | 33.6 | 92,694 | 29.1 | 81,284 | 26.4 | 101,670 | 30.8 | 100,558 | 28.4 |
| Other current assets | 4,551 | 1.7 | 3,658 | 1.1 | 7,658 | 2.4 | 16,052 | 5.2 | 19,846 | 6.0 | 19,010 | 5.4 |
| Less: Total Current Assets | 214,262 | 81.4 | 267,368 | 81.4 | 256,559 | 80.6 | 286,187 | 93.1 | 333,411 | 101.0\% | 338,029 | 95.4 |
| Less: Current liabilities (2) | 100, 568 | 38.2 | 98,796 | 30.1 | 106,160 | 33.3 | 141, 344 | 46.0 | 162,584 | 19.0 49.3 | 161,721 | 95.4 <br> 45.6 |
| Working Capital | 113,694 | 43.2 | 168,572 | 51.3 | 150,399 | 47.2 | 144,843 | 47.1 | 170,827 | 51.8 | 176,308 | 49.8 |
| Property, plant and equipment (net)(3) | 112,020 | 42.6 | 124,449 | 37.9 | 138,322 | 43.5 | 144,626 | 47.1 | 145,406 | 44.1 | 145,460 | 41.1 C |
| Intangibles (net) (4) | 10,363 | 3.9 | 12,199 | 3.7 | 13,358 | 4.2 | 4,921 | 1.6 | 4,092 | 1.2 | 3,919 | 1.1 |
| Other assets (net) (4) | -27,140 | 10.3 | 23, 0 , 319 | 7.0 | 16,243 | 5.1 | 12,991 | 4.2 | 9,637 | 2.9 | 28,610 | 8.1 |
| Total Net Assets | \$263,217 | 100.07 | 5328, $\overline{319}$ | 100.0 $\%$ | 5318, 32 | 100.0\% | \$307,381 | 100.0\%\% | \$329,962 | $\underline{100.0 \%}$ | - $\begin{array}{r}\text { 28,61,297 }\end{array}$ | 100.0\% ${ }^{\text {d }}$ |
| Capitalization |  |  |  |  |  |  |  |  |  |  |  |  |
| Short-term debt | \$ 23,444 | 8.9\% | \$ 54,485 | 16.6\% | \$ 58,550 | 18.47 | \$ 7,258 | 2.4\% | \$ 7,998 | 2.4\% |  |  |
| Long-term debt (3) | 66,600 | 25.3 | -79,315 | 24.2 | $\begin{array}{r}75,103 \\ \hline\end{array}$ | 23.6 | -89,382 | 29.1 | 84,799 | 25.7 | $\begin{array}{r}82,175 \\ \hline\end{array}$ | 23.2 |
| Total Debt | 90,044 | 34.2 | 133,800 | 40.8 | -133,653 | 42.0 | 96,640 | 31.4 | 92,797 | 28.1 | 90,250 | $\frac{23.2}{25.5}$ |
| Deferred income taxes | - | - | 580 | 0.2 | 1,980 | 0.6 | 7,039 | 2.3 | 9,251 | 2.8 | 26,411(5) | 7.5 |
| Conmon equity Total Capitalization | 173, 173 | 65.8 | 193,939 | 59.1 | 182,689 | 57.4 | 203,702 | 66.3 | 2.27,914 | 69.1 | 237,636 | 67.1 |
| Total Capitalization | \$263,217 | 100.0\% | \$328,319 | 100.07. | \$318,322 | 100.07\% | \$307,381 | 100.0\% | \$329,962 | 100.07\% | \$354,297 | 100.0\% |
| Working Capital as \% of Total Revenues | 18.9\% |  | 21.6\% |  | 24.57 |  | 21.47 |  | 23.4\% |  | - |  |
| Cash and Equivalents as \% of Total Net Assets | 14.0 |  | 7.7 |  | 7.5 |  | 17.6 |  | 22.1 |  | 13.2\% |  |

Notes:
(1) Includes cost of uncompleted contracts in excess of related billings
(3) Excluding short-term debt and currens maturities of long-term debt.
(4) Capitalized lease obligations are included for 1976, 1977 and March 31, 1978
(4) 'Deferred income" and "contracts payable" have been netted out against "other assets" except in 1978.
(5) Includes "deferred income" and "contracts payable".

Products
Completed construction contracts
Engineering and operating services
es construction contracts Cross profit
Relling and administrative expenses
Interest expense
Write off of refinery company receivable Other income net
Income (loss) from continuing operations before income taxes and extraordinary it Provision for income taxes
Income (loss) from continuing operations before extraordinary items
Income (loss) from operation of the
discontinued Fragrances Group (1)
Income (loss) before extraordinary items
Extraordinary items
Net Income (Lass)
Earnings per Common Share:
Continuing operations
Discontinued operations
nary items (2)

Average shares outstanding ( 000 's)
Dividend paid per share

| 1972 |  | 1973 |  | 1974 |  | 1975 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ 25,623 | 5.5\% | \$ 25,278 | 4.2\% | \$ 33,673 | 4.3\% | \$ 35,496 | 5.8\% |
| 300,468 | 64.2 | 383,774 | 63.9 | 448,157 | 57.4 | 413,639 | 67.3 |
| 130,993 | 28.0 | 176,902 | 29.4 | 278,114 | 35.6 | 142,228 | 23.1 |
| 11,131 | 2.4 | 14,865 | 2.5 | 21,059 | 2.7 | 23,683 | 3.9 |
| 468,215 | 100.0 | 600,819 | 100.0 | 781,003 | 100.0 | 615,046 | 100.0 |
| 377, 130 | 80.5 | 488,735 | 81.3 | 647,054 | 82.8 | 485,929 | 79.0 |
| 91,085 | 19.5 | 112,084 | 18.7 | 133,949 | 17.2 | 129,117 | 21.0 |
| $(56,301)$ | (12.0) | $(67,737)$ | (11.3) | $(80,256)$ | (10.3) | $(85,246)$ | (13.9) |
| $(16,412)$ | (3.5) | $(19,826)$ | (3.3) | $(21,032)$ | (2.7) | $(27.482)$ | (4.5) |
| $(6,975)$ | (1.5) | $(7,203)$ | (1.2) | $(8,621)$ | (1.1) | $(11,289)$ | (1.8) |
|  |  | - | - | - | - | $(34,391)$ | (5.6) |
| 6,086 | 1.3 | 7,795 | 1.3 | 11,344 | 1.5 | 3,566 | 0.6 |
| 17,483 | 3.7 | 25,113 | 4.2 | 35,384 | 4.5 | $(25,730)$ | (4.2) |
| 7,097 | 1.5 | 9,525 | 1.6 | 10,781 | 1.4 | -5,630 | 0.9 |
| 10,386 | 2.2 | 15,588 | 2.6 | 24,603 | 3.2 | $(31,360)$ | (5.1) |
| 1,288 | 0.3 | 2,540 | 0.4 | 3,149 | 0.4 | $(3,508)$ | (0.6) |
| 11,674 | 2.5 | 18,128 | 3.0 | 27,752 | 3.6 | $(34,868)$ | (5.7) |
| $\frac{-}{11.67}$ | - 2.5 | - 2.778 | $\frac{0.5}{3.5 x}$ | $\frac{-}{\$ 27.752}$ | - 3.62 | \$(34,868) | $\left.\frac{-}{(5.7}\right) \%$ |
| \$ 1.04 |  | \$ 1.56 |  | \$ 2.46 | : | \$ (2.81) |  |
| 0.13 |  | 0.25 |  | 0.32 |  | (0.32) |  |
|  |  | 0.28 |  | - |  | $\underline{-}$ |  |
| \$ 1.17 |  | \$ 2.09 |  | \$ 2.78 |  | \$ (3,19) |  |
| 2.972 |  | 9.980 |  | 9.980 |  | 10,918 |  |
| \$ |  | \$ 0.250 |  | \$ 0.700 |  | \$ 0.675 |  |


| 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: |
| \$ 28,660 | 4.2\% | \$ 39,038 | 5.3\% |
| 503,484 | 74.4 | 554,796 | 76.0 |
| 116,230 | 17.2 | 98,811 | 13.5 |
| 28,667 | 4.2 | 37,233 | 5.1 |
| 677,041 | 100.0 | 729,878 | 100.0 |
| 528,217 | 78.0 | 563,627 | 77.2 |
| 148,824 | 22.0 | 166,251 | 22.8 |
| $(86,854)$ | (12.8) | $(96,903)$ | (13.3) |
| $(26,202)$ | (3.9) | $(28,592)$ | (3.9) |
| $(9,698)$ | (1.4) | $(8,422)$ | (1.2) |
| 3097 | 0.5 | 9,423 | 1.3 |
| 29,167 | 4.3 | 41,757 | 5.7 |
| 13,726 | 2.0 | 17,429 | 2.4 |
| 15,441 | 2.3 | 24,328 | 3.3 |
| 1,181 | 0.2 | $\underline{-}$ | - |
| 16,622 | 2.5 | 24,328 | 3.3 |
| 6,969 | 1.0 | 7,110 | 1.0 |
| \$23.591 | $3.5 \%$ | \$ 31.438 | 4.3\% |
| \$ 1.35 | - | \$ 2.12 | $\pm$ |
| 0.10 |  | - | $\stackrel{-1}{ }$ |
| 0.61 |  | 0.62 |  |
| \$ 2.06 |  | \$ 2.14 |  |
| 11.480 shs. |  | 11,471 shs. |  |
| \$ 0,225 |  | \$ 0.625 |  |

$\frac{\text { Note: }}{(1)}$

(2) The extraordinary gain in 1973 resul , 1,503 , $\$ 2,410$, $\$ 796$ credit and $\$ 617$ for 1977 extraordinary it


## Signal-UOP

UOP Sources and Uses of Funds, 1973 to 1977
(Dollars in thousands; years ended December 31)

|  | 1973 | 1974 | 1975 | 1976 | 1977 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sources from Operations - $\quad$ - 1971 |  |  |  |  |  |
| Expenses (income) not affecting working capital: |  |  |  |  |  |
| Depreciation, depletion and amortization. | 11,653 | 11,866 | 15,348 | 15,493 | 15,032 |
| Writeoff of non-current refinery company receivables | - | - | 34,391 | - | - |
| Undistributed earnings of subsidiaries | (356) | $(1,515)$ | 176 | (14) | 100 |
| Deferred taxes | 1,813 | 4,539 | 1,400 | (14) | 2,212 |
| Funds from Operations | 31,238 | 42,642 | 16,447 | 32,101 | 41,672 |
| Less: Additions to plant and equipment | 19,721 | 27,447 | 29,577 | 13,386 | 16,292 |
| Dividends paid , in (l) | 2,495 | 6,986 | 7,411 | 2,583 | 7,174 |
| Increase (decrease) in working capital (1) | 14,819 | 23,387 | (22,238) | 45,736 | $25,244$ |
| Surplus (Deficit) of Funds | \$ (5,797) | \$(15,178) | \$ 1.697 | \$ 29,604$)$ | \$ $(7,038)^{-1}$ |
| Financing and Other Transactions |  |  |  |  |  |
| Increase (decrease) in long-term debt (net) | \$ 2,158 | \$ 12,715 | \$ (4, 212) | \$ (62) | \$ (4,583) |
| Proceeds from sale of stock | \$ 2,158 | \$ 12,715 | 31,500 | \$ (62) | \$ (4,583) |
| Decrease (increase) in non-current receivables | 9,294 | $(2,739)$ | $(31,756)(2)$ | 2,984 | 2,595 |
| Dispositions | 4,269 | 5,760 | 1,722 | 14,773 (3) | 1,226 |
| Extraordinary item |  |  |  | $6,969(4)$ | $7,110(4)$ |
| Other | $(9,924)$ | (558) | 1,049 | $4,940$ | $690$ |
| Total | \$ 5.797 | \$ 15,178 | \$ (1,697) | \$ 29.604 | \$ 7.038 |

Notes:
(1) Includes changes in short-term debt and current maturities of long-term debt.
(2) Before writeoff of refinery company receivables.
(3) Includes $\$ 11,963$ from the sale of the Fragrances Group.
(4) Reductions in taxes on income from continuing operations.

Growth and Operating Data by UOP Industry Segment 1973 to 1977 (1)
(Dollars in thous ands; years ended December 31)


Notes:
Notes: (1) Data is derived from continuing operations.
(2) Base year is 1972

```
Revenues
        Royalties
        Engineering and operating services
            Total
    Construction
    Fabricated metal products
        Metal tubing
        Other metal products
            Tota
    Transportation equipment products
        Vehicle seats
            Pollution control devices
    Chemical and plastics
    Other products
            Total
Operating Profit
    Petroleum and petrochemical
    Construction
    Fabricated metal producits
    Transportation equipment
    Chemical and plastics
    other product:
            Total Operating Profit
```

Corporate Items
General corporate expenses
Corporate interest expense - net
Income from partially-owned subsidiaxies
Writeoff of receivables
Total Corporate Items
Corporate items as $\%$ of operating
profit
$\frac{\text { Income (Loss) From Continuing Operations }}{\text { Before Income Taxes and Extraordinary }}$
$\frac{\text { Identifiable Assets }}{\text { Petroleum and petrochemica }}$
Construction
Fabricated metal products
Transportation equipment
Chemicals and plastics
Other products
Total Identifiable Assets
Investment in non-consolidated
subsidiaries
Corporate assets and research
facilities
Assets of discontinued Fragrances Group
Total Assets

Discrepancies may occur due to rounding.

## Signa1-UOP

UOP Quartexly Dividend History, 1970 Through First Ouarter 1978


Comparison of Market and Operating Data for Selected Competitors of UOP

| 7 |  |
| :---: | :---: |
| 7 |  |
| - | Air Products and Chemicals (3) |
| $\cdots$ | Aluminum Company of America (4) |
|  | American Cyanamid (3) (8) |
|  | C. F. Braun Co. (5) |
| 7 | Combustion Engineering (6) |
|  | Deere \& Co. (7) |
| 7 | Exxon (8) |
| $\cdots$ | Federal Mogul (4) |
|  | Fluor (5) |
| $?$ | Foster Wheeler (5) |
|  | W. R. Grace (3) |
| 7 | International Harvester (7) |
| $\cdots$ | Ralph M. Parsons Co. (5) |
|  | Pullman (6) |
| 7 | Union 011 (8) |
| - | AVERAGE |
| 7 | MEDIAN |
| $\cdots$ | UOP |



Notes:
(1) Fully-diluted EPS from continuing operations and before extraordinary items.
(2) Net margin and return on average equity based on net income from continuing operations before extraordinary ftems
(3) Competes with UOP's Automotive Products Division (emissions control), part of Transportation Equipment Products
(4) Competes with UOP Fabricated Metal Products.
(5) Competes with UOP's Procon construction business.
(6) Competes with UOP's construction business in "air correction" work.
(7) Competes with UOP's Bostrom Division (vehicle seating), part of Transportation Equipment Products.
(8) Competes with UOP's process licenses and royalties for petrochemicals and catalysts
(9) Price offered by Signal in March 1978 in connection with merger of UOP into Signal.
(11) Closing price of UOP on February 28, 1978 last day prior to announcement that Signal and vop were in negotiations.
(11) VOP had a loss in 1975. EPS from continuing operations were positive in 1976 and increased $57 \%$ in 1977 over 1976. However, 1977 EPS was $13.8 \%$ less than 1974.

International Telephone \＆Telegraph
Tenneco，Inc．
Rockweli International
United Technologies Corp．
LTV Corp．Grace
Gulf \＆Western Industries
Litton Industries，Inc．
TRW，Inc．
TransAmerica Corp
City Investing co
Signal cos．
Raytheon Co．
Textron，Inc
Singer Co．
IU Internati
Teledyne trc．
Northwest Industrie
IC Industries Inc．
American Standard，Inc．
Dart Industrie
Aveo Corp．
Walter Kidde，Inc：
White Consolidated
White Consolifdated Induatrie
SCM Coxp
Alco Sta
daxd Corp．
AMF Inc．
Brunswick Corp．
Chromalloy American Corp．
Leax Slegler
Fuqua Industries Inc．
Dayco Corp．
Bangor Punta corp
A－T－O Inc．
National Service Industries
Scott \＆Fetzer Co
Averages
Corages
Compandes with sales greater
than $\$ 2$ billion（ 14 total）
Companies with sales between
$\$ 1.5$ and 2.5 billion（ 9 total）
Compantes with sales less
than $\$ 1.5$ billiton（16 total）
Entire group of 39 companies Average
Median
uop inc．

|  |  <br>  4 |
| :---: | :---: |
| ${ }_{\square}^{\infty} \times \sim$－ |  <br>  |
|  |  $*$ |
|  |  <br>  |

$\left.\begin{array}{cc}\text { P／E at } & \begin{array}{c}\text { Fiscal } 1977 \\ \text { Book } \\ \text { Vlue }\end{array} \\ \text { P／1／78 } \\ \text { Per Share }\end{array}\right]$

|  |  | $\begin{gathered} 1977 \\ \text { Net } \\ \text { Margin(3) } \end{gathered}$ | $\begin{aligned} & 1977 \\ & \text { Pre-Tax } \\ & \text { Maxgin } \end{aligned}$ | $\begin{gathered} 1977 \\ \text { Return on } \\ \text { Average } \\ \text { Equity(3) } \\ \hline \end{gathered}$ | $\begin{gathered} 1977 \text { Debt } \\ \text { as Z of } \\ \text { capitalization } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 65\％ | 2．5\％ | 4．37 | 6.82 | 11．5\％ | 37．5\％ |
| 95 | 11.9 | 5.7 | 10.7 | 15.2 | 54.6 |
| 97 | 8.3 | 2.4 | 4.9 | 11.8 | 32.6 |
| 99 | 17.4 | 3.5 | 7.4 | 14.5 | 16.6 |
| 20 | Neg．（4） | （0．5）（4） | （0．9）（4） | Neg．（4） | 73.8 |
| 67 | 13.6 | 3.5 | 6.6 | 11.8 | 39.8 |
| 46 | 13.0 | 4.1 | 5.7 | 13.0 | 53.7 |
| 65 | 36.1 | 1.6 | 3.0 | 6.7 | 42.5 |
| 93 | 13.7 | 4.7 | 9.0 | 17.6 | 32.0 |
| 85 | 14.4 | 5.3 | 9.1 | 17.4 | 51.8 |
| 37 | 4.9 | 2.7 | 4.7 | 10.5 | 49.4 |
| 63 | 29.8 | 3.4 | 6.0 | 12.0 | 30.7 |
| 154 | 7.2 | 4.0 | 7.2 | 19.5 | 13.1 |
| 102 | 9.7 | 4.9 | 9.3 | 15.5 | 25.9 |
| 72 | Neg．（4） | 3.3 | 5.9 | 17.9 | 52.6 |
| 53 | 0.5 | 2.6 | 4.3 | 9.3 | 55.8 |
| 179 | 60.5 | 8.8 | 16.0 | 32.9 | 30.1 |
| 118 | 26.8 | 6.7 | 12.5 | 19.3 | 40.2 |
| 34 | 5.6 | 4.2 | 6.4 | 7.9 | 37.8 |
| 111 | 37.6 | 4.9 | 9.1 | 23.7 | 37.3 |
| 100 | 14.8 | 6.8 | 12.5 | 12.3 | 23.2 |
| 66 | 21.6 | 3.1 | 5.0 | 15.7 | 50.4 |
| 35 | 25.0 | 6.5 | 11.4 | 17.2 | 77.9 |
| 57 | 10.8 | 3.8 | 7.4 | － 11.9 | 40.0 |
| 88 | 13.3 | 3.8 | 7.1 | 16.3 | 45.7 |
| 44 | 26.8 | 2.7 | 5.0 | 11.4 | 39.4 |
| 106 | 30.2 | 3.5 | 6.1 | 20.0 | 35.1 |
| 96 | Neg．（4） | 3.5 | 6.6 | 12.9 | 37.3 |
| 73 | Neg．（4） | 3.7 | 6.9 | 10.0 | 32.1 49.3 |
| 63 128 | 8.8 34.2 | 3.2 | 6.6 8.1 | 14.8 18.3 | 49.3 46.1 |
| －66 | 11.4 | 2.2 | 4.0 | 9.9 | 48.8 |
| 57 | 2.0 | 2.6 | 5.3 | 10.6 | 47.8 |
| 60 | 7.5 | 2.4 | 4.6 | 15.7 | 60.1 48.7 |
| 64 | 36.8 | 3.2 | 9.0 | 14.7 | 48.7 |
| 40 | 11.0 | 2.0 | 3.8 | 9.2 | 51.5 |
| 97 | 4.3 | 5.1 | 9.4 | 16.9 | 7.9 25.9 |
| 130 | 8.6 | 7.6 | 16.0 | 20.7 | 25.9 55.4 |
| 53 | Neg．（4） | 0.5 | 0.6 | 2.9 | 55.4 |
| 788 | 14．0\％ | 3.97 | 7.08 | ：13．6\％ | 39.67 |
| 85 | 24.1 | 5.2 | 9.2 | 17.4 | 45.0 |
| 73 | 15.8 | 3.4 | 6.2 | ． 13.5 | 41.9 |
| 77 | 17.1 | 4.0 | 6.2 | 14.5 | 41.8 |
| 67 | 13.2 | 3.6 | 6.7 | 14.6 | 40.2 |
| 106\％ | （6） | 3．3\％ | 5.78 | 11．38 | 28.12 |
| 73 | － | － | － | － | － |

Notes：
（1）Ranked in descending order by sales．
（2）Fully－diluted EPS from continuing operations and before extraordinary items．
Net margin and return on average equity based on net income from
continuing operations before extraordinary items．
（4）Excluded from averages，Allied products PE distorted by declining earnings
（6）wop had a loss in 1975．EPS from continuing operations were positive in 1976 and increased
（7） $57 \%$ in 1977 over 1976．However， 1977 ERS was still 13．82．less than 1974 ．

|  | New York Stock Exchange |  |  | Standard \& Poor's 400 Industrials |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Companies | \%. of Total | 7. Cumulative | Companies | 7. of Total | \%. Cumulative |
| Price/Earnings Ratios $\because$ - |  |  |  |  |  |  |
| Less than 4X | 190 | 13 | 13 | 36 | 9 | 9 |
| Less than 6x; greater than or equal to 4 X | 450 | 31 | 44 | 121 | 30 | 39 |
| Less than 8 X ; greater than or equal to 6 X | 400 | 28 | 72 | 108 | 27 | 66 |
| Less than 10x; greater than or equal to 8 X | 202 | 14 | 86 | 65 | 16 | 82 |
| Less than 12x; greater than or equal to 10x | 83 | 6 | 92 | 34 | 9 | 91 |
| Less than 15x; greater than or equal to 12x. | 42 | 3 | 95 | 14 | 4 | 95 |
| Greater than or equal to 15 X | 72 | 5 | 100 | 22 | 5 | 100 |
| Total | $\underline{1.439}$ | 100 |  | 400 | 100 |  |
| Dow Jones Industrial Average | 8.3x |  |  | . |  |  |
| Standard \& Poor's 400 Industrials | 8.3x |  |  |  |  |  |
| Market/Book Value Ratios |  |  |  |  |  |  |
| Less than $60 \%$ | 312 | 22 | 22 | 75 | 19 | 19 |
| Less than 80\%; greater than or equal to 60\% | 323 | 22 | 44 | 88 | 22 | 41 |
| Less than 100\%; greater than or equal to $80 \%$ | 333 | 23 | 67 | 73 | 18 | 59 N |
| Less than 120\%; greater than or equal to 100\% | 166 | 12 | 79 | 50 | 13 | 72 m |
| Less than 150\%; greater than or equal to $120 \%$ | 133 | 9 | 88 | 49 | 12 | 84 ' |
| Greater than or equal to $150 \%$ | 174 | 12 | 100 | 65 | 16 | $100 \stackrel{\text { ¢ }}{\text { - }}$ |
| Total | 1,441 | 100 |  | 400 | 100 | . |
| Dow Jones Industrial Average | $88 \%$ |  |  |  |  |  |
| Standard \& Poor's 400 Industrials | $117 \%$ |  |  |  |  |  |

[^1]

| Signal-40p |  |  |  |  | Exhitit 0 Page 2 of $j$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mergers and Acquisition Offers for Selected Industrial Companies Valued at $\$ 50$ Million or More, 1977 Through May, 1978 |  |  |  |  |  |  |  |
| Date of Final offer or | Acquiror Acquired | Business ofAcquired $\quad$ Terms of offer (A) |  | $\begin{aligned} & \text { Value } \\ & \text { of } \\ & \text { offer } \\ & \text { (MM) (B) } \end{aligned}$ | Prior to Announcement |  |  |
| Proxy |  |  |  | Price | Date(C) | Premium |
| 8/10/77 | International Telephone \& Telegraph Corp. ("ITT") Eason Oil ('E") | $0 i 1$ and gas exploration | 2.3 ITT common shares per E common share ( $\$ 78.78$ total value per E share) |  | \$141. | \$61 | 5/ 3/77 | 27\% |
| 8/26/77 | Gulf 011 Corp. Kewanee Industries Inc. | Oil and gas exploration and chemicals | \$47.50 cash | 455 | $363 / 8$ | 2/23/77 | 31 |
| 9/ 2/77 | Portland-Zementwerke Hetdelberg Aktiergesellochaf Lehigh Portland Cement Company | Cement and aggregates | \$25 cash | 85 | $213 / 8$ | 6/27/77 | 17 |
| 9/12/77 | Turner \& Newhall Ltd. <br> Philip A. Hunt Chemical Corp. | Asbestos | $\$ 20$ cash for $2,950 \mathrm{~mm}$ shares ( $52 \%$ of outstanding shares) | 59 | $131 / 4$ | 8/19/77 | 51 |
| 9/30/77 | Pepsico ("P") <br> Pizza Hut | Fast food | 1.55 P share common shares (\$37 equivalent) | 311 | $301 / 4$ | 6/1.5/77 | 22 |
| 10/11/77 | Congoleum Corporation Curtis Noll Corporation | Automotive after $\$ 25$ cash market and industrial maintenance produces |  | 61 | 18 7/8 | 9/19/77 | 33 |
| 10/19/77 | Bayer AG <br> Miles Laboratorles | Propreitary pharmeceuticals, medical products and chemicals | \$47 cash | 254 | $251 / 4$ | 9/22/77 | 86 |
| 10/19/77 | Northwest Industries Coca-Cola of Los Angeles | Soft drink bottling | \$40 cash | 201 | $213 / 4$ | 10/6/77 | 84 |
| 10/19/77 | St. Regis Paper Co. ("R") Southland Paper Mills Inc. ("S") | Newsprint | 1.1 R common share per $S$ share ( $\$ 36.72$ value per $S$ share) | 247 | 27 1/2 | 5/27/77 | 34 |
| 10/26/77 | E11 Lilly \& Co. ('E") Ivac Corporation ("I") | Medical electronic instrument systems. | 0.95 shares of E common <br> per I share (\$36.69 <br> value per I share) | 56 | $297 / 8$ | 7/19/77 | 23 |
| 10/27/77 | Allegheny Ludlum Chemecron | Diversified industrial: (gases, piping and chemicals) | $\$ 55$ in preferred or debentures | 230 | $301 / 2$. | 3/1/77 | 80 |
| 10/28/77 | Combustion Engineering Vetco | offshore oil tools | \$23 cash | 164 | $147 / 8$ | 9/9/77 | 55 |
| 10/28/77 | Kennecott Carborundum | Fabricated abrasive products | $\$ 66$ cash | 557 | $331 / 4$ | 10/28/77 | 98 |
| 11/14/77 | AMCA International Corporation Amtel, Inc. | Engineering and construction, petroleum market ing, consumer an industrial products | \$15 cash | 71 | $121 / 4$ | 11/9/77 | 22 |
| Notes: <br> (A) <br> (B) <br> (C) <br> (D) | re exchange of common stack is offered, the equiva ce of the acquiror's stack on the day prior to pub tal consideration for all shares purchased for cas t trading date prior to first public announcement mary net income from continuing operations as set | lent value is det lic announcement. or exchanged for of merger negotia forth in proxy. | ermined based on the clos <br> other securities. <br> tions or an acquisition o |  |  |  |  |

Mergers and Acquisition offers for selected Industrial Companies Valued at $\$ 50$ Miliion or More, 1977 Through May, 1978


Notes:
(A) Where exchange of common stock is offered, the equivalent value is determined based on the closing price of the acquiror's stock on the day prior to public announcement.
(B) Total consideration for all shares purchased for cash or exchanged for other securities.
(C) Last trading date prior to first public announcement of merger negot

Mergers and Acquisition Offers for Selected Industrial
Companies Valued at $\$ 50$ Million or More, 1977 Through May, 1978

| Date of Final offer or |  | Business of |  | $\begin{aligned} & \text { Value } \\ & \text { of } \\ & \text { offer } \end{aligned}$ | Pri Annou | to ement |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Proxy | Acquired | Acquired | Terms of offer (A) | (TM) (B) | Price | Date( ${ }^{\text {( }}$ ) | Premium |
| 4/24/78 | Louisiana-Pacific Corp. Fibreboard Corp. | Forest products | \$17.00 cash | \$ 56 | \$12 1/4 | 1/6/78 | 39\% |
| 4/27/78 | Dayton Hudson ( $\mathrm{D}-\mathrm{H}$ ) Mervyn | Retailing | 0.8 shares of $\mathrm{D}-\mathrm{H}$ common (\$32 equivalent) | 302 | 22 | 1/20/78 | 45 |
| 5/ 2/78 | General Cable Automation Industries | Systems engineering for the U.S. Navy | \$20 cash | 101 | 14 5/8 | 3/14/78 | 37 |
| 5/10/78 | Bow Valley Industries Ltd. Flying Diamond Oil Corp. | Explores for and develops 011, gas and coal reserves | \$30 cash | 122 | $253 / 8$ | 12/15/77 | 14 |
| 5/16/78 | $\begin{aligned} & \text { Philip Morris } \\ & \text { Seven-Up } \end{aligned}$ | Soft drink bottling | \$48 cash | 519 | $303 / 4$ | 4/28/78 | 56 |
| 5/19/78 | The Diversey Corp. <br> The Molson Companies Led. | ```Produces clean- ing and sanitizing chemicals``` | \$30 cash | 61 | $191 / 4$ | 3/30/78 | 56 |
| 5/22/78 | $\begin{gathered} \text { PepsiCo ("P") } \\ \text { Taco Bell } \end{gathered}$ | Fast-service mexican food | 1.43 shares of P <br> (\$46 equivalent) | 158 | 24 | 2/ 5/78 | 92 |
| 5/31/78 | Esselte AB Dymo Industries, Inc. | Manufactures visual and retail systems | \$30 cash | 57 | 14 3/4 | 3/14/78 | 103 |
| 6/14/78 | Beatrice Foods Tropicana Products | orange juice | \$52 cash for 49\%; remainder exchange for preferred | 489 | $337 / 8$ | 3/3/78 | 54 |
| 7/10/78 | Unilever <br> National starch | Adhesives, starches and specialty chemicals | \$73.50 cash | 482 | $443 / 4$ | 12/ 1/77 | 64 |
| 7/13/78 | United Technologies AMBAC Industries | Diversified industrial products | $\$ 48$ eash for $49 \%$; ramainder exchanged for preferred | 209 | $347 / 8$ | 2/24/78 | 38 |
| 8/18/78 | Johnson Controls Globe-Union | Electric batteries and electronic components | $\$ 40$ common or preferred stock | 258 | 33 | 5/25/78 | 21 |
| 8/24/78 | Time Inc. Inland Containex | Corrugated shipping containers | \$35 cash for 25\%; convertible preferred and common stock for the remainder | 283 | $301 / 4$ | 5/18/78 | 16 |

[^2]

Sumary of Selected Acquisitions Where the Acquiror Owned a Minimum of $30 \%$ of the Acquired


[^3](2) Incernational General sold shares to the public in 1965.
(3) Controlled by Nalter kidde since incorporation in 1969 .
(4) Brunswick sold $15 \%$ to the public in 1968 .

## INTRODUCTION

Having established defendant's failure to meet their fiduciary standards as reaffirmed by Delaware law in Singer, Najjar, Tanzer and Lynch, this Court then has the task of determining, for the first time ${ }^{l}$, the appropriate remedy in a "fairness" case. The starting point will be the fact that Signal, the controlling party violated its fiduciary obligations to the minority stockholders in expelling them from any future equity participation in UOP.

This Court should keep two important factors in mind in determining the appropriate remedy in a "fairness" case. First, fashioning an appropriate remedy requires more than simply determining the value of the shares based upon the traditional appraisal analysis of earnings, market value and net asset value. To consider only value based on an appraisal analysis would eliminate the very purpose of the fairness hearing. A finding of liability after a trial reflecting the dominant party's violation of its duties would be entirely

[^4]pointless, if the end result is simply to give the shareholders that which the limited appraisal analysis guarantees them under the statute. (8 Del.C. \$262) To put it another way, why should the Court try the case on liability (8 Del.C. §262) if the damage remedy is only that which is guaranteed to them by the appraisal statute regardless of liability.

Second, in considering the proper measure of relief, it is clear that once liability has been established, it would be manifestly unjust to adopt a remedy under which the defendants would be allowed to enjoy their illgotten gains. In Mills v. Electric Auto-Lite, 396 U.S. 375, 90 S.Ct. 616 (1970), the Supreme Court found liability had been established through misrepresentations in the proxy; it then focused on the issue of the appropriate remedy to guide the lower court:

Our conclusion that petitioners have established their case by showing that proxies necessary to approval of the merger were obtained by means of a materially misleading solicitation implies nothing about the form of relief to which they may be entitled. We held in Borak that upon finding a violation the court were 'to be alert to provide such remedies as are necessary to make effective the congressional purpose,' noting specifically that such remedies are not to be limited to prospective relief. 377 U.S. at 433, 434, 84 S.Ct. at 1560. In devising retrospective relief for violation of the proxy rules, the federal courts should consider the same factors that would govern the relief granted for any similar illegality or fraud. One important factor may be the fairness of the terms of the merger. possible forms of relief will include setting
aside the merger or granting other equitable relief, but as the Court of Appeals below noted, nothing in the statutory policy 'requires the court to unscramble a corporate transaction merely because a violation occurred.' 403 F .2 d , at 436 . In selecting a remedy the lower courts should exercise 'the sound discretion which guides the determinations of courts of equity,' keeping in mind the role of equity as 'the instrument for nice adjustment and reconciliation between the public interest and private needs as well as between competing private claims.' Hecht Co. V. Bowles, 321 U.S. 321, 329-330, 64 S.Ct. 587, 591-592, 88 L.Ed. 754 (1944), quoting from Meredith V. Winter Haven, 320 U.S. $228, ~ 235,64$ S.Ct. 7, 11, 88 L.Ed. 9 (1943).

In the remedy stage of the fairness hearing, therefore, the Court should operate under the classic equitable precept that for every wrong equity will provide a remedy. In fashioning a proper remedy, the Court's hands are not tied by statute or precedent to the limited focus and mathematical formula of the appraisal remedy prescribed by statute (8 Del.C. §262). For example, in fashioning the proper remedy for the wrong done to the minority shareholders of UOP, the court could, under its equitable powers:

1. Order recission;
2. Order that Signal issue shares of its own stock to compensate UOP's minority shareholders for the difference between $\$ 21.00$ and the true value of their UOP stock;
3. Order that UOP stockholders be given a portion of Signal's business in the form of a new venture:
4. Order the distribution to UOP's minority shareholders of certain UOP's assets (including excess liquidity and timberland) which do not contribute significantly to its earning power;
5. Order monetary award in the amount that bona fide arm's length negotiations would have produced as a per share price in this transaction;
6. Order an award of monetary damages for the true value of UOP's stock; or,
7. Award other appropriate relief pursuant to its equitable powers.

In this case, the Court sits to perform equity's
historical function of fashioning a remedy to redress a wrong. Equity's function one noted author defined as follows:
"The most common of the non-technical meanings of equity, one in which lawyers themselves not infrequently use the word, is as a synonym for 'natural justice.' In this sense to say that certain conduct is merely a way of saying that to the speaker or writer it seems fair or just. Even as a technical word in the lawyer's vocabulary, moreover, equity has more than a single meaning. Often in legal discussions it stands simply for a liberal and humane interpretation and application of law in general." (Citing Cook on Equity).
Van Hecke, Equitable Remedies, ACB, Ch. I, p. I (1959).
The recent decisions of Singer $v$. The Magnavox Co.,
Del.Supr., 380 A. $2 d 969$ (1977) and Roland International Corporation, et al. v. Najjar, Del.Supr., 407 A.2d 1032 (1979) hold that appraisal pursuant to 8 Del.C. $\$ 262$ is not the appropriate
method of determining an award of damages when the dominant party has breached its duties to the minority in a forced merger. After an illegal cashout merger, Singer and Najjar, hold that there is to be a totally different approach in the determination of damages from the narrow, rigid appraisal analysis mandated by 8 Del.C. $\$ 262$, and the case law that has evolved over the years in the interpretation of that statute.

In Singer, the Supreme Court held:
Defendants concede that they owe plaintiffs a fiduciary duty, but contend that, in the context of the present transaction, they have met that obligation by offering fair value for the Magnavox shares. And, say defendants, plaintiffs' exclusive remedy for dissatisfaction with the merger is to seek an appraisal under $\$ 262$. We disagree. In our view, defendants cannot meet their fiduciary obligations to plaintiffs simply by relegating them to a statutory appraisal proceeding.
380 A.2d at 977.
In Najjar, the Court focused on the critical element of timing which may be manipulated by the controlling party. The Court said:

The unmistakable focus in Singer was on the law of fiduciary duty. See 380 A. 2d at 976. Such a duty is owed by the majority stockholders (who have the power to control corporate property and, indeed, corporate destiny) to the minority stockholders of the corporation when dealing with the latter's property. It may not be circumvented by full compliance with the procedures permitted under and required by the corporation statutes, nor is it discharged by remitting minority shareholders to a statutory appraisal remedy (often based upon the status of the
market and the elements of an appraisal), the timing of which is entirely within the control of the majority. The fiduciary duty is violated when those who control a corporation's voting machinery use that power to "cash out" minority shareholders, that is, to exclude them from continued participation in the corporate life, for no reason other than to eliminate them.
407 A. 2d at 1034.
Later in connection with the element of timing, the
Court said:
"The merger described in the case at bar, however, presents a classic 'going private' transaction, with the majority having complete control over the timing of the 'squeeze play' on the public stockholders - a timing conceivably selected to favor the majority only, based upon the status of the market and the elements of an appraisal. According to the complaint, the merger was simply the means chosen to eliminate the comparatively few public stockholders of Roland. It has been argued with pursuasion that this type of merger calls for the strictest observance of the law of fiduciary duty. 89 Yale L.J. at 1365. We agree."
407 A. 2d at 1037.
Thus, Singer and the subsequent cases teach that an ousted shareholder who has no control over the transaction, and who has not been dealt with fairly, may not be summarily relegated to appraisal. Because the timing of the tainted transaction was within the control of the defendant, this Court
is required to scrutinize the complete transaction. (Note) The rigid limits of a statutory appraisal precludes the required change of approach. Most important, however, appraisal does not focus on the critical factors in assessing damages where the dominant party clearly controlled the timing of the forbidden merger. Under appraisal, not only the minority shareholder, but also the Court, is relegated to a circumscribed situation that was entirely controlled by the wrongdoer himself.

It is clear, then, that in determining the true value of corporate shares of the ousted minority, the Court should not limit itself (as the appraisal cases do) to a determination of going concern value based solely on past earnings. The relief granted should be governed by traditional equitable principles which consider fully the facts of the particular case and the manner in which the dominant party effected the forbidden merger which occasioned the need for a remedy. In Altscluler v. Cohen, 471 F.Supp. 1372 at 1383 (D.C. Texas 1979) the Court said of Mitchell v. Texas Gulf Sulphur Co., 446 F.2d 90 (loth Cir. 1971):

NOTE: Signal's timing in this case was perfect from its point of view. On February 28 , 1978 , UOP stock was as low as it had ever been in that entire month. Of course, the announcement of Signal's cashout merger at $\$ 21.00$, "capped" UOP's stock. Moreover, the stock market generally rose about 13\% from February 28, 1978 to May 26, 1978 according to the defendant's expert, William Purcell of Dillon Reed (Purcell 221). Signal's own stock rose in the period from about $\$ 28.00$ to $\$ 39.00$ (Purcell 221). Signal's timing and structuring of the merger precluded UOP minority shareholders from sharing in the general rise of the stock market of which UOP would surely have been a part.

The case does, however, attempt to apply the basic rule that the objective is to place the party back in the same situation which he would have enjoyed had it not been for the fraudulent inducement.

In this case, the Court's objective, simply stated, is to put the UOP minority stockholders in the situation they would have been in but for the defendant's illegal conduct. If that is not possible, then the Court must use its equitable powers to fashion a remedy that as closely approximates giving the minority shareholders what they had, as is possible.
I. IN FINDING A REMEDY, THE COURT SHOULD DETERMINE THE PRICE THE ARM'S LENGTH BARGAINING WOULD HAVE PRODUCED

The best method of fixing damages in a fairness case is to determine the price the parties would have agreed to
as the result of arm's length negotiations.
"The concept of fair price (or, as it is sometimes formulated, fair value), in the context of an evaluation of the fairness of a proposed merger, represents a determination which is economic or financial in character. Although the Delaware courts have not fully explained the nature of the economic or financial determination which is to be made, it appears from a reading of the cases that the basic principle is to determine what might be characterized as an idealized (or "inherent" or "true") fair value - i.e., the price or price range at which a rational willing buyer and a rational willing seller would exchange the stock or other security in question in an arm's length transaction, assuming that each had knowledge of all the relevant facts concerning not only the security in question and the issuer, but also other comparable securities and issuers.

Nathan \& Shapiro, Legal Standards of Fairness of Merger Terms Under Delaware Law, 2 Del.J.Corp.L. 44.

A definition of fair price in the context of arm's
length bargaining clearly contemplates independence - a willing
buyer and a willing seller. It also necessitates access to
all relevant facts. These elements tie closely to the concept of fair dealing which has been described in the merger context as follows:


#### Abstract

"The concept of fair dealing examines the relationships between the parties. Deciding whether there has been fair dealing on the part of a controlling corporation involves consideration of the facts and circumstances surrounding the preparation, presentation and negotiation and stockholder approval of the proposed merger terms. For example, in order to avoid a claim that the controlling corporation has unilaterally dictated the terms of the merger or otherwise sought unfair advantage from its control position, it is common practice for the controlled corporation to appoint an independent negotiating committee composed of board members who are not affiliated with the other corporation, to charge that committee with the explicit function of representing the public stockholders and to have the independent negotiating committee retain independent investment bankers and legal counsel to assist in the negotiation and evaluation of proposed merger terms.


Id at 46-47.
In discussing recent developments in the acquisition market in this country, one noted expert said:
"Because of the competitive nature of the acquisition market, companies not only need to respond wisely, but often must respond quickly as well. The growing independence of corporate Boards and their demand for better information to support strategic decisions such as acquisitions, have raised the general standard for acquisition analysis. Finally, sound analysis convincingly communicated, can yield substantial benefits in negotiating with the target company's management or in the case of tender offers, its stockholders."

Rappaport, Strategic Analysis for More Profitable Acquisitions, Harv.Bus.Rev., p. 100 (July-August, 1979).

In an arm's length transaction, the final decision is made in a competitive context after negotiation. But in this case, just as it controlled the timing of this transaction, so Signal controlled its structure. The Court's review of the transaction in an effort to determine fair value is severely limited by the dominant party's own wrongdoing. To put it another way, Signal has made it difficult to determine what arm's length negotiations might have produced. But, it is a familiar maxim that equity will not allow a wrongdoer to profit by his own misdeed.

In this context, this means that the Court should not be deterred by Signal's wrongdoing from determining what the probable results of arm's length bargaining would have been.

Signal's financial officers made calculations based on their estimates and detailed knowledge of the financial affairs of UOP including, not only its record to date, its undervalued assets, its precise financial status at the time, but also its future prospects including its five-year future projections (Ex. 74, Ex. U-399). Signal's management learned that even at a price of $\$ 24.00$ or more, it would be profitable for Signal to effect the cashout merger of UOP's minority shareholders.

Signal's opening "offer" to Mr. Crawford was $\$ 21.00$. Neither Mr. Crawford, nor any member of UOP's management, nor
any Board member even thought of negotiating for the unfortunate minority, much less actually doing so. However, if the requisite bargaining had taken place, Signal would have had the economic incentive to pay at least $\$ 24.00$ per share before abandoning the cashout merger of the minority. In this situation, Signal is estopped from now claiming that it would not have paid $\$ 24.00$ since its own wrongdoing prevented the required arm's length bargaining from taking place. Amory v. Delamirie, 1 Str. 505, 3 Eng. 664 (1722) a copy of which is attached, marked Exhibit $B$. As a very second best alternative, Signal comes into this trial with the well nigh impossible burden of convincing the Court that it would not have, at the end of full-fledged bargaining, paid less than $\$ 24.00$.

In 1975, Signal started the bargaining by offering $\$ 19.00$ after UOP had demanded $\$ 25.00$. In the end, Signal came up to $\$ 21.00$.

UOP's attractiveness to a willing buyer rested on far more than earnings alone. Had UOP obtained the advice of a truly independent investment analyst working to aid an independent management and Board in obtaining the best price and best terms for the UOP shareholders, UOP and such an advisor would have utilized all of the following points in negotiations:

1. Due to UOP's improved "mix" in earnings, its improved earnings trend and its valuable cash flow, UOP was worth far more than in 1975.
2. UOP had valuable patents which would continue to produce a valuable stream of income.
3. UOP had excess liquidity it could operate profitably on a lower current assets ratio. This excess liquidity of up to $\$ 50$ million could be removed by the successful acquirer. This excess would have to be added to the asking price;
4. UOP had valuable timberland and mineral rights which, like the cash, was contributing little, if anything, to earnings. These assets would have been appraised and again added to the asking price to arrive at UOP's true value;
5. A resolute and independent team of UOP negotiators would have demanded a stock-for-stock tax free exchange or an alternative;
6. Negotiators for UOP would have refused "point blank" to have the UOP Board stampeded into accepting the first Signal offer with less than a week to consider the proposal;
7. Independant negotiators would have explored the possibility of an another purchaser. There was no real possibility in this factual situation that signal could or would "go away". Signal was locked in and even the threat of a competitor for the UOP minority shares would have quickly forced a higher offer from Signal.

Properly analyzed and presented, Signal would have been told that UOP's real total value to an acquirer was in the range of $\$ 300-330$ million. (The above range, of course,
could have been more depending on the appraised value of UOP's patents and timberland. Based on the above, UOP's negotiators would have been duty bound to make an opening demand of not less than $\$ 31.00$ per share.

Of course, Signal's high handed conduct has effectively prevented anyone from knowing what the price would have been if there had been bona fide arm's length bargaining. However, it is Signal's obligation to convince the Court that the true price range is not between the price Signal initially determined it could profitably pay (\$24.00) and plaintiff's analysis that $\$ 26.00$ was the minimum fair value for the shares.

In offering $\$ 21.00$ per share for the publicly held common stock of UOP's minority, Signal valued UOP at $\$ 241,063,494$. UOP's true value far exceeded the value set by Signal, the acquirer, which dominated every aspect of this merger transaction. Duff and Phelps will show that the true value of uop as a going concern at the time of the merger, at a minimum, exceeded $\$ 300,000,000$ or $\$ 26.00$ per share.

Duff and Phelps valued UOP in the context of how they would have advised UOP's Board had it retained them to value the minority shares at the time of Signal's merger proposal. Of course as contrasted with the Lehman Brothers, Duff and Phelps was and is truly independent and without any predisposition as to value of the stock.

Duff and Phelps valued UOP based on its own particular characteristics. Two aspects stood out. First, in its analysis of comparable companies in the market Duff and Phelps focused on UOP's earnings and net assets. Second, separate and distinct from the comparable analysis, Duff and Phelps studied UOP's dividend paying capacity by a cash flow analysis. This approach focuses on first, net cash generated from operations and, second, certain assets which contributed little or nothing to operations, but which would be at the disposal of the $100 \%$ owner. It is that same projection of income and
dividends which attracted Signal in making this acquisition.
A. Since 1975, UOP Had Increased The Quantity And Quality Of Its Earnings From Operations

To determine the value of earnings, the Court should rely on the best evidence of value available. In seeking to acquire all the UOP stock Signal's attention was on the stream of income which UOP could and would produce. If this Court determines that money damages is the appropriate remedy, there is ample authority both financially and legally for this Court to focus on the value of the stream of income in a fairness case.

In discussing how the valuation process works in determining the value of corporate stock, Graham, Dodd and Cottle state:

In this review of valuation, work done to date, we should point out that since the 1930's some important changes in the judicial view of "value" have brought it closer to the thinking of the experienced investor. The earlier valuations, made mainly for tax purposes, often followed a rigid formula based on part earnings

Plaintiff's experts have discussed the distinction between assessing the value of a minority interest in shares of stock on the New York Stock Exchange, and the value of the entire business enterprise. It is that former value which Graham, Dodd \& Cottle primarily focus, but their analysis is valuable also for the latter estimate of value as well.
and upon the balance-sheet equity. It was assumed either that future earnings would repeat those of the past or else - most impractically - that only the past earnings and the assets counted in finding value. In a series of Supreme Court decisions the rule has now been laid down that the value of a company for purposes of reorganization depends primarily upon its expectable earning power. (Emphasis added)

Graham, Dodd, Cottle \& Tatham, Security Analysis, p. 436 (4th Ed. 1962).

Moreover, the value of the UOP business enterprise is an element separate and distinct from the market price of its stock. Apart from the market price of a stock, even one traded on a national securities exchange, the business itself has a separate and distinct value. In focusing on this "intrinsic value" and the distinction between value and current market price, Graham, Dodd \& Cottle stated:

The most important single factor determining a stock's value is now held to be the indicated average future earning power, that is, the estimated average earnings for a future span of years. Intrinsic value would then be found by first forecasting this earning power and then multiplying that prediction by an appropriate 'capitalization factor'."

Graham, Dodd \& Cottle, Security Analysis, p. 28 (4th Ed. 1962). In Tri Continental Corporation v. Battye, 74 A.2d

71 (Del.Supr. 1950), Justice Wolcott gave recognition to the importance of future earnings:

In determining what figure represents this true or intrinsic value, the appraiser and the courts must take into consideration

> all factors and elements which reasonably might enter into the fixing of value. Thus, market value, asset value, dividends, earning prospects, the nature of the enterprise and any other facts which were known or which could be ascertained as of the date of the merger and which throw any light on future prospects of the merger corporation are not only pertinent to an inquiry as to the value of the dissenting stockholders interest, but must be considered by the agency fixing the value.

David J. Green \& Co. v. Dunhill International, Inc.,
249 A.2d 427 (Del.Ch. 1968) recognized that unadjusted past earnings are an unsatisfactory basis in valuing a going concern. The Court said it was not obliged to use past earnings blindly without reference to other factors on the record.

In Universal City Studios, Inc. v. Francis I. dupont
\& Company, 334 A.2d 216, 218 (Del.Supr. 1975), the Supreme Court held that, even in appraisal cases, a determination of going concern basis
"necessitates not only the Court's examination. The prospective financial condition of the subject corporation and the risk factor inherent in the corporation and the industry within which it operates are vital factors to be considered at arriving at a realistic present earnings value. These considerations are manifested in the valuation process through the choice of a capitalization factor or multiplier."

In Legal Standards of Fairness Terms Under Delaware Law, 2 Del. Journal of Corporate Law pg. 44 (1977) the author in discussing Harriman v. E. I. du Pont de Nemours \& Company, 411 F.Supp. 133 (D.Del. 1975) and Muschel $v$. Western Union Corp., Del.Ch., 904 (1973 said:

Although Delaware law is clearly weighted toward the use of an historical average to arrive at an earnings base figure, there is some support for also taking into account projected earnings, particularly if doing so would enhance the value of the stock of the controlled corporation. For example, in Harriman, the major issue was the valuation of dupont stock held by Christiana, a closed-end investment company. As a relatively small part of its assets, Christiana owned 100\% of the stock of a Wilmington newspaper. In assessing the fairness of the terms of proposed merger between Christiana and dupont, the court accepted in its entirety a valuation of the newspaper made by "a leading newspaper broker and recognized authority on the valuation of privatelyheld newspapers." While the expert examined earnings over the last several years, his valuation involved multiples of gross revenues and projected net earnings, the latter higher than they had been in the past. The expert, the court noted, "concluded that a prospective purchaser would emphasize the potential, rather than actual earnings and revenues ... particularly in view of operating inefficiencies he deemed readily remediable." That projected earnings may be taken into account in determining earnings value is also suggested by another recent case, Muschel $v$. Western Union Corp., in which shareholders of the acquiring corporation sued to enjoin a merger, alleging overpayment and offering as proof pro forma dilution in earnings per share. The acquiring corporation offered and the court seemingly accepted five-year projected earnings for the combined operation which, it was argued, more than offset the initial dilution.

In Universal City Studio, Inc. V. Francis I. dupont
Co., supra, the Court focused on the studio's guarantee of
future earnings for four years after the merger from contracts
with television networks. UOP's patent revenues are similar
guaranteed future earnings. In many of appraisal cases the weakness or unreliability of past earnings was overcome by the use of a higher multiplier based on projected earnings and future prospects. The asserted reliance on past earnings was in fact refuted by the Court's holdings. In exercising its equitable powers, this Court should use current or budgeted figures the correctness of which was confirmed by actual results to date.

The Court has at times rejected the use of future earnings in determining value in appraisal cases. In many cases, as noted, this reluctance to base an award on openly future earnings was masked often by the use of a higher multiplier. In appraisal cases, however, remedy is not premised on the Court's finding of liability based on the dominant parties illegality or fraud, but rather on a fixed statutory standard. Here, different standards are applicable. UOP's bright future would have certainly been the chief factor if there had been negotiations. This Court should not do less than the parties would have done: it should consider the available evidence on UOP's economic future in determining what the true value of the UOP stock which Signal wrongfully appropriated.

The decisions in Singer and Najjar require this Court to look to the future as well as the past. In particular, the Najjar decision turns on the power of the dominant party to time the transaction. From 1975 until February 28, 1975

Signal had time to study its position carefully. (Note) Equipped with a superior position and inside information on February 28, 1975 it set its own price without negotiations. Specifically Signal knew that the actual first quarter results up to March 1 , 1978. These favorable results were never reflected in the market price of UOP's stock. Those first quarter results demonstrated that UOP's budget for 1978 could be met. These results were not released, however, until well after the announcement of the $\$ 21.00$ merger. Signal's superior knowledge included UOP's internal and confidential Five-Year Projection of Earnings. (Ex U-399) Signal's focus was on the future. Their neat timing confirms the confidence in the future well being of UOP.

In addition, UOP had improved vastly since 1975. Signal had taken over and installed a new president. UOP had written off the setback in the Come-By-Chance Refinery Project. The earnings mix had changed from more risky construction ventures, subject to fluctuations to improved and more profitable lines of business, less subject to fluctuation. UOP's timberland had grown in value. UOP had developed a plan of utilizing this timberland which would add to its book value. Finally,

[^5]there was excess cash in UOP: this was a plum ripe for removal by a l00\% owner who did not have to share half of it with minority shareholders. Any true valuation of UOP's earnings must include some consideration of UOP's improving future.

Rappaport, " Strategic Analysis for More Profitable Acquisition," Harv.Bus.Rev., p. 101 (July-August, 1979) states that recently more and more companies examine the cash flow of an enterprise rather than earnings in determining its true value:

Recently, Business Week reported that as many as half of the major acquisitionminded companies are relying extensively on the discounted cash flow (DCF) technique to analyze acquisitions. While mergers and acquisitions involve a considerably more complex set of managerial problems than the purchase of an ordinary asset such as a machine or a plant, the economic substance of these transactions is the same. In each case, there is a current outlay made in anticipation of a stream of future cash flows."

Duff \& Phelps considered in their analysis the amount of cash that UOP would produce from operations during the year 1978. In doing so, Duff \& Phelps also considered the historic earnings of UOP. These earnings were studied in detail to determine their makeup and "mix" and to discern that there was an upward trend in the UOP earnings. Not only were they increasing, but also the quality of the mix was improving. Although Signal management had available to it the projection of earnings over the next five years, Duff \& Phelps did not use that projection in their analysis. In fact, prior to the
submission of its opinion and prior to the deposition of Messrs. Bodenstein and Hansen, Duff \& Phelps did not even review these projections. Rather, Duff and Phelps looked to the budgeted earnings for 1978 which first quarter actual results confirmed as realistic. Thus Duff and Phelps determined that UOP's 1978 earnings were an accurate guide by which to measure the true value of UOP. The many factors which led Duff and Phelps to its conclusion are discussed in their detailed report and in the depositions of Messrs. Bodenstein and Hansen. Using current earnings with a conservative multiple of ten, and considering UOP's condition and the economy in general, Duff \& Phelps concluded that UOP's minimum value was $\$ 26.00$ per share.
B. UOP Had Significant Assets Which Contributed Little to Earnings, But Which Added a Separate And Distinct Element of Value For An Acquiring Company

Having determined the fair value of UOP's earning capacity, Duff and Phelps turned its attention to certain additional assets. The true value of UOP's Patents were not reflected on the balance sheet though they were producing very substantial income. The actual value of the patents was "buried": No up-to-date or current appraisals existed or were ordered in connection with the merger. Their earnings value was reflected in Duff and Phelps' computation of earnings from operations. While nothing should be added to the earnings value, these substantial potential rights did add strength to uop's earnings.

Two additional assets were considered: UOP's current assets and real estate holdings. Current assets were excessive. Timberland, valued at its historic cost on the balance sheet, was worth much, much more than the accounting figures showed. Neither the excess cash or the timberland made more than a minimal contribution to UOP's earnings. Excess cash and UOP's huge holdings of timberlands, both of which could be siphoned off or sold by an acquiring company without damaging UOP's earnings potential, made UOP an attractive bride in the merger market.

Although it is generally believed that a strong cash or working capital position is good for a company, it may not be. Graham, Dodd and Cottle have pointed out that excessive cash may have an adverse affect on valuation:

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            "Some companies sell at too low a
    price because their cash assets are too
    large. It sounds like a paradox, but a
    moment's thought will show that the state-
    ment can be true. Market price depends
    chiefly on earnings; cash assets bring
    in no earnings or very little. A company
    with nothing but cash in the bank could
    not possibly earn enough to support a
    market price equal to its cash asset value.
            It has been by no means unusual to
    find companies that are so rich in cash
        that they are necessarily poor in earning
        power as related to book value."
Graham, Dodd & Cottle, Security Analysis, p. 564 (4th ed.
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    1962).
    In discussing this issue, the authors go on to suggest that when this condition is found the earning power will be necessarily understated. Therefore, a reasonable amount of this excess cash should be added to the earning power value to determine the correct value of the enterprise. Id. at 564. Duff and Phelps' report shows that there was some $\$ 30$ to $\$ 50$ million in excess liquidity in UOP. Some percentage of this excess should be added to the earning power to arrive at the value of the total business enterprise. Under the company's most restrictive covenants on long-term debt, UOP was only required to have working capital of at least $\$ 25$ million. As of December 31,1977 , its working capital was $\$ 145$ million, exceeding the loan requirements by $\$ 120$ million. Conservatively $\$ 50$ million of this non-working cash couid be removed without injuring UOP. The minority shareholders should not be deprived of their share of this asset.

UOP owned 300,000 acres of hardwood and softwood timber and pulpwood in the northern United States and Canada.* These lands were valued at their historic cost or under $\$ 40$ per acre on UOP's balance sheet. Of course no appraisal of

[^6]current value exists. Hardwood timberland is conservatively valued at $\$ 100$ per acre. These timberlands are another "buried" asset, making UOP most attractive to a potential acquirer (i.e. Signal). The acquirer could sell the timberland and remove cash. He would then have enough to pay for much of its costs of acquisition. These buried and undervalued assets confirmed Duff and Phelps' analysis that the value of UOP was, at a minimum, $\$ 300,000,000$.

Their analysis of UOP's improved condition** and other factors described in its report, led Duff and Phelps to value UOP conservatively at $\$ 26.00$ per share. It was a very attractive investment on the acquisition market as Signal well knew.

[^7]III. SIGNAL'S $\$ 21.00$ PER SHARE PRICE DOES NOT REFLECT THE MARKET VALUE OF UOP PLUS SUBSTANTIAL PREMIUMS PAID FOR SIMILAR COMPANIES

In attempting to justify the price of $\$ 21.00$ for UOP stock as of May 26 , 1978, Dillon Read \& Company used the market price of the stock as of February 28, 1978, three months prior to the merger. The market price as of February 28, 1978 was a reliable guide as of that date as to what the market thought the value of a share of UOP common was worth. But, the market price on February 28, 1978 is not the value as of May $28,1978$.

The Delaware Courts have considered the use of such values in determining fair value in appraisal cases. The Court in Roland International $V$. Najjar, supra, addressed the weakness of using market price in cases such as these. The Court recognized that the dominant party controls the timing of the transaction which is necessarily tied to the status of the market. The Supreme Court made this comment in connection with its holding that the minority shareholders may not be relegated to appraisal. This holding means that if the market price of the company's stock cannot adequately be determined as of the time of the merger, it should not be used. Only in cases where there are no significant developments in the corporation's condition from the date of the announcement to
the date of the merger, should it be used. The Court recognized that the timing of these transactions are oftentimes critically related to market conditions. This case presents a classic illustration of the rule.

A brief review of the facts demonstrates how critical the timing was to Signal, the dominant party. First, Signal struck with lightning speed, announcing the merger and closing it within a week (except for minority approval). There was no reason for this haste except that it suited Signal's plan to get UOP's Board to act quickly. Secondly, the factors which would have certainly affected the market value of the common stock between the date of announcement and the date of the merger, were never permitted to react in the free and open market. As the Duff \& Phelps Report points out, the stock market at this time, was in a general price rise, rebounding from previous lows. (Duff \& Phelps Report, p. 13.) In addition, UOP's actual first quarter earnings were not announced until April, 1978. The first quarter report disclosed, not only that UOP, in fact, had strong and improved earnings, but confirmed the recent trend in UOP of gradually increasing earnings and shareholders' equity. Duff \& Phelps concluded that had these factors been permitted to be reflected in the open market, the market price of UOP stock would have rebounded to its previously high level. Even in appraisal cases, Delaware Courts have reduced the weight given to market value when
external factors affect the market value of the stock and show it to be an unreliable guide.

For example, in Spoorborg $v$. City Specialties Stores,
Inc., Del.Ch., 123 A.2d 121 (1956), the dominant party for at least two years prior to the merger maintained the market by a bid fixed at a specified price. Virtually every transaction during that period was affected by the bid. Also, in Re Olivetti Underwood Corp., Del.Ch., 246 A.2d 800 (1968), the Court pointed out that the market for the stock was strongly influenced by a tender offer made for the stock made five months before the merger. The Court, in order to find a market price unaffected by the dominant party, was required to use the market price before the tender offer, some five months prior to the merger. During the interim period, the market price was effected by the known position of the dominant party so that it did not provide a reliable guide for valuation purposes.

These cases demonstrate how even under the appraisal approach, the Court, in searching for a market price, is at times forced to refer back to values long before the merger. Not only is the minority, but the Court itself, is cast in a difficult situation in regard to the timing and structure of the transaction, both of which were in the exclusive control of the dominant party. Such timing and control curbs or blocks the reaction on the free and open market to news of important
developments in a company's business. A key aspect in determining the value of a corporate stock, therefore, is lost by the dominant party's timing. Duff and Phelps' analysis demonstrates that the developments in UOP and in the stock market in general from February to May, 1978, should lead this Court to hold that an unadjusted February figure is not a reliable guide in determining market value as of May, 1978.

Market price has additional limits in determining value for cash-out mergers. To use the market price of a minority interest as the value of an entire company on the acquisition market, is to confuse apples with bananas.

There is no doubt that the market price of a publicly held stock traded on a national exchange is an accurate measure, in most instances, of the value of a share of the stock. But, the market price of a share has limits in valuing the entire enterprise in the acquisition market. First, the market does not reflect a price established by the knowledge and information available to a person in Signal's position. Signal had access to information unavailable to the public. Signal's knowledge and the public's incomplete knowledge are not comparable. The viewpoint of a large institutional investor demonstrates these limitations. Although it may seek to maximize its return in a portfolio, it does not examine such a purchase from the viewpoint of acquiring the entire
company with the resulting power to set management policy and dispose of assets (such as removing excess cash from the business).

Another factor demonstrating the difference between the market value and "enterprise value" is the premium over market which acquiring companies pay in such transactions. The defendant's experts confirmed the distinction between a market price and the price which must be paid for a going concern. They assert that merger transactions inevitably command a premium over the market price. (Dillon Read Report, p. 17.) As pointed out by Duff \& Phelps, the value paid for a share of the corporation is far different than that paid for $100 \%$ ownership. The premium paid over the market price for the minority interest is not a "bonus" to the public shareholder. Rather, it is a quid pro quo for the valuable investment attributes acquired with 100\% control. Bodenstein pps. 99-104.

Premium over market has been discussed by the Delaware courts in the context of an acquisition. Premiums provide the Courts with a test of the fairness of a transaction after the value has been computed. Premiums are not part of the computations of value, but do provide a further means of testing that computation. Premiums are significant in both tender offers and acquisitions, although their purpose is different. The premium in a tender offer, when the individual investors are free to sell or hold, is tied to the percentage of ownership which the acquirer seeks to obtain. (A five percent
tender may not require as much as a $30 \%$ tender.) A merger
resulting in a premium over market, however, reflects the difference between the total "enterprise value" of the company and its minority interest value. In reaching a value for the entire company, a premium results from the bargain struck between the acquiror and acquiree. A tender offer for $100 \%$ control may follow a similar approach.

Rappaport discussed premiums in the acquisition market for the very period in question:
"Most acquisitions are accomplished with cash today, rather than with packages of securities as was common in the 1960 's. Finally, the current merger movement involves the frequent use of tender offers that often lead to contested bids and to the payment of substantial premiums above the pre-merger market value of the target company. In 1978, cash tender offer premiums averaged more than $70 \%$ above premerger market values."
Rappaport, Strategic Analysis for More Profitable Acquisition, Harv.Bus.Rev., (July-August, 1979).

Analyzing the premium which Signal paid to UOP minority shareholders in 1978, Duff and Phelps found it inadequate when compared with other similar merger transactions for the same period. This test demonstrated the $\$ 21.00$ paid by signal was inadequate. On the other hand, the premium which would have been paid had Duff and Phelps' valuation been used, would have resulted in a premium which would have been adequate when tested against other similar transactions.

In making its ultimate decision, the Court should make certain that its finding on value is confirmed by a premium that is within range of premiums in comparable transactions.
IV. DEFENDANT'S EXPERT'S ANALYSIS IS BASED ON INADMISSABLE APPRAISAL METHODS AND GROSSLY UNDERSTATES UOP'S NET ASSET VALUE

If this Court determines that the appropriate remedy is monetary damages based upon UOP's true value on the merger date, the report of Dillon Read \& Co. does not show the Court the correct way to determine the worth of UOP's entire business enterprise. Dillon Read's valuation analysis purports to include elements traditionally used in appraisal cases: market value, net asset value and investment value. Carefully examined, however, it turns out that all three are concerned only with the market value of a minority interest in UOP's common stock as of February 28, 1978. Such an analysis was rejected in the appraisal cases and, a fortiori, should be rejected in this case.

In finding "net assets" value, Dillon Read merely computed the book value of UOP and compared it with the average premiums or discounts which stock market investors would reasonably pay for stock or assets of comparable companies. See Dillon Read Report, pps. 15-16. This is really nothing more than computing what appears to be a "net asset value", and then bringing it back to a figure based on market value. It is not "net asset value" as that term is defined under Delaware law. Moreover, special circumstances and other factors present here, demonstrate that the true net asset value of UOP was
far in excess of the estimate offered by the defendants. An approach similar to Dillon Read's was rejected in Gibbons $v$. Schenley Industries, Inc., Del.Ch., 339 A.2d 460 (1975). There, the Chancellor held:

First of all, I agree with the appraiser's conclusion that asset value may not be determined by adding to Schenley's book value, the average premium over book which stock market investors would reasonably pay for the stock or assets of comparable companies. Market and acquisition prices presumably reflect an allowance for the value of a business as a going concern, as opposed to the value of physical plant, and neither is an accurate measure of the fair market or theoretical liquidation value of Schenley's assets.

339 A.2d at 472.
Net asset value is a separate and distinct valuation factor reflecting the current or fair value of the assets. Even though UOP was not anticipating liquidation, the net asset approach looks toward that end.

The book value of UOP was as reflected by its balance sheet as of the date of merger. That figure is an accounting term which this Court, in previous cases, has characterized as "almost meaningless" in determining the net asset value of the corporation. The cases require adjustments to that raw accounting figure to determine the correct net asset value for UOP. These adjustments differ depending on the type of asset under scrutiny.
A. CURRENT ASSETS ARE CORRECTLY VALUED AT BALANCE SHEET FIGURES

Due to the fact that current assets are those which are easily converted into cash, they carry a value very close to that which appears on the balance sheet. The determination of this value is not complicated and generally follows the balance sheet figures.

## B. FIXED ASSETS SHOULD BE VALUED AT CURRENT

 REPLACEMENT COSTS, RATHER THAN BOOK VALUEThe fair market value of the operating or fixed assets presents for the Court a more difficult question which Dillon Read ignored. Book value equals the depreciated original costs of the assets. This value does not reflect their real or present value which is established by using the current replacement cost of the assets. This was the approach taken in Heller v. Munsingwear, 98 A.2d 774 (Del.Ch. 1953) where the Court characterized the accounting book value or depreciated original cost as "almost meaningless" because of the lapse of time necessarily involved. The Court held that if net asset value is to be given weight independently, it should employ figures showing the current value or the depreciated reproduction costs of the fixed assets. Thus, in considering the net asset value the court should look at the current appraised value or insurance values of a particular asset in question. If this Court is to consider net assets, only evidence based on current value should be received.

In Felder. V. Anderson, Clayton \& Co., Del.Ch., 1959 A. 2d 278 (1960), the Court used depreciated reproduction costs in determining the fair value of the assets. In Felder, an appraisal case, the court utilized net asset value as an independent factor in determining fair value. The Court concluded that, there being no better evidence of value, the depreciation reproduction cost or "sound value" was permissable evidence in arriving at the asset value. Felder v. Anderson, Clayton \& Co., supra at 282-284. A close review of the court's opinion demonstrates that the asset value, if it is to be given any independent weight in a fairness case, should use current figures not tied to the corporation's "going concern value." Finally, the net asset approach factor was considered and discussed thoroughly in Poole v. N. V. Deli Maatschappij, 243 A. 2 d 67 (Del.Supr. 1968). There, the Court concluded that the value to be used for determination of the net asset value was fair market value and not the value of the assets tied to a "going concern" concept. There, the Court reaffirmed the definition of "net asset value" as stated in Tricontinental V. Battye, 74 A.2d 71 (Del.supr. 1949). The Court approved the application of the cost of reproduction less depreciation method of appraising the market value of these fixed assets. 243 A. 2d at 71.

In so concluding, the court did not rule out the element of "going concern value" as part of the valuation process, but said:

We are satisfied that fair market value, so well formulated in the law of eminant domain, furnishes a more concrete and workable rule for appraisers, lawyers and judges. Any allowance for earning power of assets or value of the business, deemed necessary under the circumstances of the Gibbons case, is best left to the Court's consideration of earnings as an independent element of stock value and to the Court's exercise of the weighing function.

243 A.2d at 72.

> C. LAND SHOULD BE VALUED AT ITS CURRENT APPRAISAL VALUE

Valuation of UOP must include the fair value of its forest and mineral lands. The book value of all of UOP's land, including the forest and mineral land is only $\$ 11.5$ million. As is true with operating assets, this accounting figure merely reflects a historic cost. It has little, if anything, to do with its present value. The value of such land today far exceeds its book value. Furthermore, Delaware case law requires that the land be valued at its current appraised value for the highest and best use.

Land valuation has been considered repeatedly in Delaware appraisal cases. For example, Poole v. N. V. Deli Maatschappij, supra, held that land should be valued at fair market value. That value is not tied to a going concern value, nor is it related to the book value of the asset. Only evidence of the current value of this asset should be considered at trial. Evidence of its historic cost or its value in relation to the market price of the stock, as reflected by the Dillon Read Report, should not be admitted.
D. PATENTS SHOULD BE VALUED AT THEIR APPRAISED VALUE

The final undervalued asset which was not considered by Dillon Read in determining the net asset value is UOP's patents. Again, the patents' actual worth is found on the balance sheet at the book value which is $\$ 2,285,000$. This figure shows only the "depreciated" or amortized cost of patents which, at one time, had to be accumulated and shown on the balance sheet. The accounting rules have changed in recent years. The cost of many UOP patents were written off as expenses in the year they were incurred. For these patents, no value at all is reflected on the balance sheet. The fact that a company has substantial patent rights, therefore, does not appear on a balance sheet. (Bodenstein Deposition, pps. 181-185) Again, the accounting "book value" has nothing to do with the true value of these assets. Yet, they have a real value in producing a future stream of income.

Where a company possesses valuable rights which are not valued on the balance sheet, the Delaware Courts have computed the value of the assets and included it in the computation of the net asset value. For example, in Re olivetti Underwood Corp., 246 A. 2 d 800 (Del.Ch. 1968), the Court agreed that an exclusive agreement for distribution of the majority shareholders' products was a valuable asset not reflected on the balance sheet, but which should be reflected in the net asset value of the stock. As a result, the court found the value
for the contract rights and included it in the net asset computation.

More recently, in Tannetics, Inc. V. A. J. Industries, Inc., C. A. 5306 (July 17, 1979), Appendix, Exhibit "C", the Court considered the valuation of patents and certain contract rights in the determination of the net asset value of the corporation. The defendants denied that these should be given any value at all in determining net asset value. The court disagreed and found that the patents were capable of being valued and included them in a determination of asset value. Tannetics, Inc. V. A. J. Industries, Inc. at page 8. Again, Dillon Read ignored this element in their computation of net assets.

Neither the plaintiff nor the UOP minority shareholders have access to adequate information to establish a value for these rights. They have significant value, however, which must be considered if the Court is to determine "net asset value."

A consideration of net assets value as that term is defined under Deleware law is not reflected at all in the Dillon Read report. If the Court decides to consider net asset values, then the current or appraised value or the depreciated reproduction cost should be calculated for certain assets to arrive at a correct figure.

## CONCLUSION

Once the court has resolved the fairly straightforward question of the defendants' liability, then the court must address itself to the remedy that is appropriate in a "fairness hearing". It is clear from the holdings of the supreme Court that the defendant may not by an illegal cash-out merger relegate the minority to the rigid application of a mere valuation procedure pursuant to the appraisal statute, 8 Del.C. (and the cases interpreting that venerable statute). Rather, in this case of first instance, the Court must fashion a remedy designed basically to put the plaintiff class in the economic position it would have been in but for the illegal conduct of the defendants. The remedy of choice would therefore be rescission. The plaintiff is aware of the fact that time has passed and the rights of third parties may have intervened so that the defendants by their actions may have made rescission impossible. The Court is not powerless to do equity. On the contrary, the court has the full battery of equitable powers available to it in fashioning a remedy that does justice to the ousted minority. In fashioning such a remedy, the court may adopt the position that it will reconstruct the arm's length bargaining that should have taken place. It might simply adopt this on a estoppel basis as the remedy that best puts the parties in the position they would have been in but for the illegal conduct of the defendants, partially at least on an estoppel
basis. On the other hand, the Court may utilize such a determination of what arm's length bargaining could have produced to confirm other tests of what is "fair" under all the circumstances. To put it another way, the court could utilize such an approach as simply one test of what is fair to the minority. The other tests would be to determine the value of UOP under several different approaches just as Duff \& Phelps did. Included would be the test of the value as determined by the income stream measured by the cash throwoff of UOP. Coupled with this would be a determination of what should be added to compensate UOP minority stockholders for the loss of their share of the buried assets -- that is timberlands, excess cash and patent rights. All of these assets now belong entirely to Signal. They were valuable beyond the values shown on the balance sheet. They should be valued at their current appraisal value rather than their balance sheet values (other than the current assets). Based on the Delaware cases, including the recent directions of the supreme court as to the remedy in fairness hearings, this Court should conclude by awarding monetary damages to the minority of not less than $\$ 5.00$ additional per share as what would have been the fair price for signal to have paid in the cash-out merger. To put it another way, the Court should conclude that a minimum of $\$ 26.00$ per share
was the fair price for the minority shares of UOP which Signal wrongly appropriated.

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May 20, 1980


## UOP Inc.

Summary Data Regarding An Offer By The Signal Companies, Inc. To Acquire The Remaining Common Shares of UOP Inc.

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Opinion Letter
Draft Engagement Letter
Comparison of Offers to Purchase UOP Common Shares Made by The Signal Companies, Inc. in 1975 and 1978

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Financial Data:
Five-Year Summary of Operations Consolidated Statement of Income - 1977 and 1976 Consolidated Balance Sheet

## Lehman Brothers Th Leet Incorporated

# One William Street <br> New York, N. Y. 10004 

March 6, 1978

Board of Directors
UOP Inc.
Ten UOP Plaza
Des Plaines, Illinois 60016
Gentlemen:
You have asked for Lehman Brothers Kuhn Loeb Incorporated's opinion as to whether the proposed merger between The Signal Companies, Inc. ('Signal") and UOP Inc. ("UOP") is fair and equitable to the shareholders of UOP other than Signal. Signal currently owns 50.5\% of UOP's outstanding shares of common stock. According to the offer presented by Signal to the Board of Directors of UOP on March 6, 1978, Signal would offer to purchase for cash the remaining shares of UOP at a price of $\$ 20$ to $\$ 21$ per share.

In forming our opinion of the proposed transaction, we did, among other things, the following:

1. Reviewed UOP's Annual Reports and related financial information for each of the four years ended December 31, 1973 through 1976 and its audited financial statements for the year ended December 31, 1977;
2. Reviewed UOP's Form 10-K reports for each of the four years ended December 31, 1973 through 1976 and its Form $10-Q$ reports and Interim Reports to Stockholders for the periods ending March 31, 1977, June 30, 1977 and September 30, 1977;
3. Reviewed other information (unaudited) given to us by management regarding the business of UOP which, among other things, included the Report to the Audit Committee dated February 9, 1978;
4. Visited the principal executive offices of UOP in Des Plaines, Illinois and held meetings and discussions with its management and independent public accountants on March 3, 1978. During the course of these meetings with management we discussed the current business and future prospects of UOP and reviewed its forecasts for the year ending December 31, 1978;
5. Reviewed the historical and recent market prices and trading volumes of UOP common stock;
6. Reviewed the terms of the Offer to Purchase UOP common stock made by Signal in April, 1975; and
7. Reviewed certain other transactions in which companies already owning common shares in other companies sought to acquire the remaining common shares of those companies.

In the process of forming our opinion expressed herein, we did not make or obtain independent reports on or appraisals of any properties or assets of UOP and have relied upon the accuracy (which we have not independently verified) of the audited financial statements and other information furnished to us, or otherwise made available, by UOP.

Mr. James W. Glanville, a managing director of Lehman Brothers Kuhn Loeb Incorporated, has been on the Board of Directors of UOP since 1972 and is familiar with the business and future prospects of UOP.
-3-

On the basis of the foregoing, our opinion is that the proposed merger is fair and equitable to the stockholders of UOP other than Signal.

# Very truly yours, <br> LEHMAN BROTHERS KUHN LOEB INCORPORATED 

By

> Managing Director

Lehman Brothers Kuhn Loeb Incorporated One William Street
New York, New York 10004

Attention: Mr. James W. Glanville
Dear Sirs:

We have asked Lehman Brothers Kuhn Loeb Incorporated ("Lehman") to furnish the Board of Directors of UOP, Inc. ("UOP") with a written opinion as to whether the proposed merger between UOP and The Signal Companies is fair and equitable to the stockholders of UOP other than Signal. We agree to pay Lehman a fee of $\$ 150,000$ for the services rendered in connection with the preparation and delivery of this opinion.

We agree to hold Lehman harmless against and from any and all losses, claims, damages or liabilities, joint or several, to which Lehman may become subject in connection with the arrangements agreed to herein, under any statute, at common law or otherwise, and to reimburse Lehman for any legal or other expenses (including the cost of any investigation and preparation) incurred by Lehman arising out of or in connection with any action or claim in connection therewith, whether or not resulting in any liability; provided, however, that we will not be liable to reimburse you in any case (a) to the extent that any such loss, claim, damage or liability results from your misfeasance in connection with the
performance by you of the services which are the subject of this letter, or (b) for any amount paid by you without our consent in settlement of any such action or claim. This and any future agreement for indemnification and reimbursement shall extend upon the same terms to any controlling person, director, officer or employee of Lehman.

Very truly yours, UOP, INC.

BY:

Comparison of Offers to Purchase UOP Common Shares Made by The Signal Companies, Inc. in 1975 and 1978

|  | $\frac{1975 \text { Offer }}{\$ 21 \text { Per Share for }}$ | 1978 Offer |  |  | Percentage Change from1975 to 1978 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $50.5 \%$ of UOP | \$20 | \$21 | \$22 |  |
| Ratio of Offer Price to: |  |  |  |  |  |
| Latest 12 Months' EPS (a) (b) | 8.7x (b) | 9.4x | 9. 9x | 10.4x |  |
| Prior Fiscal Year EPS (a) (c) | 7.6 (c) | 9.9 | 9.9 | 10.4 |  |
| Book Value | 1.10 | 1.01 | 1.06 | 1.11 |  |
| Indicated Dividend (d) | \$. 90 | \$. 80 (d) | \$ . 80 (d) | \$ 8.80 (d) | (11.1)\% |
| Indicated Yield at Offer Price | 4.3\% | 4.0\% | 3.8\% | 3.6\% | (11.1)\% |
| Premium over Last Price Prior to |  |  |  |  |  |
| Announcement of Offer (b) | $51 \%$ | 38\% | 45\% | 52\% |  |
| Premium over Price One Month |  |  |  |  |  |
| Prior to Announcement of Offer | 62\% | 40\% | 47\% | 54\% |  |
| UOP Price Range in 12 Months Prior <br> to Announcement of Offer |  |  |  |  |  |
|  | \$161/2-91/2 | \$185/8-131/2 |  |  |  |
| Dow-Jones Industrial Average on Day |  |  |  |  |  |
| Prior to Announcement of Offer | 808.43 | 742.12 |  |  | (8.2)\% |
| Per Share Data: |  |  |  |  |  |
| Latest 12 Months' EPS (a) (b) | \$2.41 |  | \$2.12 |  |  |
| Prior Fiscal Year EPS (a) (c) | 2.78 |  | 2.12 |  | (31.1) |
| Book Value (Latest Fiscal Year End) | 19.14 |  | 19.85 |  |  |
| Last Price Prior to Offer | \$137/8 | \$141/2 |  |  | 4.5 |
| Price One Month Prior to Offer | 13 | 141/4 |  |  | 9.6 |

(a) Earnings per share from continuing operations before extraordinary items.
(b) Results for first quarter, 1975 , which were $\$ .44$ per share in 1975 versus $\$ .81$ per share for the year earlier period, were announced on April 18 , 1975 , three days prior to Signal's offer to purchase announced on April 21.
(c) In 1974 the Company sold a portion of the assets of one of its operating divisions, but did not account for the gain on the sale as an extraordinary item. The sale resulted in a pre-tax gain of $\$ 2.5$ million. Assuming a capital gains tax rate of $30 \%$, if the after-tax effect of the sale were removed from net income and treated as an At its February, income before extraordinary items would have been reduced from $\$ 2.78$ to $\$ 2.61$,
(d) At its February, 1978 Board meeting, prior to the announcement on March 1, 1978, by Signal of its offer to purchase the remaining common shares of Uop, Uop announced an increase in its dividend per share from $\$ .70$ to $\$ .80$ annually.

(a) Based upon earnings from continuing operations of \$2. 12 for the year ended 12/31/77.
(b) Assumes book value at $12 / 31 / 77$ of $\$ 19.86$.
(c) Market Price of $\$ 141 / 2$ on $2 / 28 / 78$, prior to announcement by The Signal Companies that acquisition of remaining public shares was contemplated.

## Table II

UOP INC.
Summary Characteristics of Tender and Exchange Offers

## Related to Multiple Stage Acquisitions

Transactions in Which Subsequent Offer Exceeded First Offer (6)

Transactions in Which Subsequent Offer Equalled First Offer (2)

Transactions in Which Subsequent Offer Was Less Than First Offer (5)

Average of Second Offer As a \% of First Offer
$115.9 \%$
$100.0 \%$
$88.1 \%$

Average Market Premium
First
$34.0 \%$
$29.1 \%$
45. $6 \%$

Second
$21.2 \%$
$32.9 \%$
$25.9 \%$

Average Percentage Change in Price of Common
$26.8 \%$
$28.9 \%$
$32.7 \%$
(2. 3)\%
5. 0\%
(0.4)\%

| Acquiring Company/ $\qquad$ | Date | \% Owned Prior To Offer | $\begin{aligned} & \% \\ & \text { of Shares } \\ & \text { offered for } \end{aligned}$ | $\begin{aligned} & \text { Market } \\ & \text { Value } \\ & \text { of Offer } \\ & \text { (Milliong) } \end{aligned}$ | Market Price Per Share Before Tender | Tender Price | Market <br> Premium | Ratio of Subsequent Price to First Price | $\begin{aligned} & \text { S\&P } 400 \\ & \text { Index } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Latest } \\ 12 \text { Months' } \\ \quad \text { EPS } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Tender Price to: } \\ \text { Latest } 12 \\ \text { Month ' EPS } \\ \hline \end{gathered}$ | $\qquad$ | Number of Shares Tendered |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DPF/ |  |  |  |  |  |  |  |  |  |  |  | 1000:) | (000.) |
| Interstate Brands | 6/13/75 | - ${ }^{-1}$ | 43.0\% | \$ 14.5 | \$10 1/2 | \$14.50 | 38.1\% | - | 101.55 | \$1.51 | 9.6x | 1,000 | 855 |
|  | 11/9/76 | 49.5\% | 30.6 | 11.0 | $131 / 2$ | $151 / 2$ | 14.8 | 1.07x | 110.86 | 2.07 | 7.5 | 1.000 | 871 |
|  | 12/27/76 | 69.4 | 30.6 | 12.7 | $131 / 2$ | $151 / 2$ | 14.8 | 1.07 | 118.04 | 2.07 | 7.5 | 88 | 711 243 |
| Atlantic Richfield/ Anaconda | 3/17/76 | ${ }^{-1}$ | 27.1 | 167.0 | 22 | 27.00 | 22.7 |  | 113.48 | deficit | deficit | 6,000 | 7.000 |
|  | 7/1/76 | 27.1 | 72.9 | 516.4 | 26 | 32.00 | 23.1 | 1.19x | 116.47 | deficit | deficit | 16,100 | Merger |
| Mobil/Marcor | 6/15/74 | - | 42.0 | 612.5 | $261 / 2$ | 35.00 | 32.1 | - | 103.37 | 3.39 | 10.3 | 17.250 |  |
|  | 3/12/76 | 54.0 | 46.0 | 579.4 | 33 | 39.00 | 18.2 | 1.14x | 113.43 | 2.92 | 13.7x | 14,485 | 33, 200 (took 17. 250 Merger |
| Western Pacific/ Veeder Industries(d) | 10/14/74 | ${ }^{-}$ | 50.0 | 22.7 | $183 / 4$ | 29.17 | 55.6 | - | 81.19 | 4.51. | $6.5 \times$ | 783 |  |
|  | 3/4/76 | 50.2 | 49.8 | 21.8 | $203 / 8$ | 25.00 | 22.6 | . $86 x$ | 111.17 | 2.63 | 9.5x | 776 | 693 700 |
| Thyssen-Bornemisza/ Indian Head | 9/27/73 | - | 20.6 | 29.7 | $193 / 4$ | 27.00 | 36.7 | - | 109.08 (b) | 3.47 | 5. 7x | 1.100 |  |
|  | 7/15/74 | 34.0 | 66.0 | 156.4 | $213 / 4$ | 27.00 | 24.1 | 1.00x | 83. 78 (b) | 3.61 | 6. $0 x$ | 3,830 | 1.213 3.310 |
|  | 2/11/76 | 90.6 | 9.4 | 17.6 | 23 | 30.00 | 30.4 | 1.11 x | 100.77(b) | 3.12(c) | 6. $9.6 x$ (c) | 3,830 586 | 3,310 $\mathrm{~N} / \mathrm{A}$ |
| Cavenharn Ltd. $/$ Grand Union Co. (e) | 11/15/73 | 0 | 51.0 | 60.8 | $115 / 8$ | 19.00 | 63.4 | $\bigcirc{ }^{-}$ | 115.13 | 1.28 | 14.8x | 3. 200 | 5,210 |
|  | 11/14/75 | 51.0 | 30.6 | 29.1 | $115 / 8$ | 15.30 | 31.6 | $0.80 x$ | $101.88^{\circ}$ | deficita) | deficit(a) | 1.900 | 1,873 |
| Emhart Corp. 1 USM Corp. | 7/10/74 | - | 30.0 | 31.0 | $181 / 2$ | 25. 00 | 35.1 | - | 90.34 | 4.31 | 5. 8 x | 1.241 |  |
|  | 9/8/75 | 30.0 | 24.0 | 23.0 | $181 / 8$ | 23.00 | 26.9 | 0.92x(f) | 96.36 | 4.42 | 5. 2 x | 1,000 | 1.242 |
| General Cigar Co, Inc. $/$ Helme Productis, Inc. | 6/23/75 | , | 100.0 | 25.2 | 10 | 13.25 | 32.5 | $\therefore$ | 104.88 | deficit | deficit | 1,900 | 1,629 |
|  | 8/27/75 | 86.0 | 14.0 | 3.6 | 91/8 | 13.25 | 45.2 | 1.00x | 94.76 | deficit | deficit | 272 | N/A |
| Pechiney Ugine Kuhlmann/ Howmet Corp. | 10/24/73 | 55.0 | 9. 3 | 21.5 | $163 / 4$ | 21.50 | 28.4 | - | 124.06 | 1.39 | 15.5x | 1. 000 | 2,720 |
|  | 7/10/15 | 70.0 | 30.0 | 61.3 | 15 3/8 | 19.00 | 23.6 | 0.88x | 106.30 | 2.14 | $8.9 x$ | 3.228 | 2,475 |
| Vicker: Energy Corp/ Tranocean Oil, Inc. | 4/30/70 | ${ }^{-}$ | 51.0 | 83.2 | N/A | 12.81 | N/A | - | 82,57(b) | N/A | N/A | 6,500 | 6,500 |
|  | 9/30/74 | 53.5 | 46.5 | 70.7 | 95/8 | 12.00 | 24.8 | 0. 94 x | 63.54(b) | 0.49 | 24.5x | 5,889 | 4,215 |
| Int'l. Minerala \& Chemicals/ Commercial Solvente(h) | 3/11/74 | ${ }^{-}$ | 23.0 | 21.0 | $237 / 8$ | 30.00 | 25.7 | - | 110.62 | 2.60 | 11.5x | 700 | , 150 |
|  | 6/28/74 | 37.3 | 9.8 | 9.0 | $247 / 8$ | 30.00 | 20.6 | 1.00x | 97.39 | 3.45 | 8.7x | 300 | ${ }_{2} 28$ |
| Gulf \& Western/ Brown Co. | 6/28/73 | 53.5 | 12.1 | 5.4 | $91 / 2$ | 10.75 | 13.2 | - | 117.22 | 1.20 | 9.0x | 500 |  |
|  | 6/6/74 | 57.4 | 5.7 | 3.0 | $101 / 8$ | 12.00 | 18.5 | 1.12x | 103.93 | 2.24 | 5.4x | 250 | 300 610 |
| Gulf \& Western/ Madison Square Garden | 11/21/73 | 20.0 | 20.8 | 7.0 | 5 | 7.00 | 40.0 | - | 112.14 | 0.08 | 87.5x | 1.000 | 380 |
|  | 6/6/74 | 28.0 | 5.1 | 1.7 | 5 | 6.75 | 35.0 | 0.96x | 103.93 | 0.38 | 17.8 x | 1.000 | 400 |
|  | 1/8/76 | 37.0 | 10.4 | 2.8 | 43/8 | 5.50 | 25.7 | 0.79 x | 105.79 | 0.81 | $17.8 x$ $6.8 x$ | 500 | 400 |
|  | (i) $3 / 4 / 77$ | 39.1 | 60.9 | 29.2 | 5 | 10.00 | 100.0 | 1.43x | 112.60 | 0.91 | $11.0 x$ | 2,922 | 94 754 |
| United Brands/ Foster Grant | 5/22/73. | 39.8 | 14.4 | 7.8 | $151 / 2$ | 25.09 | 61.3 | - | 114.77 |  |  |  |  |
|  | 4/12/74 | 54.2 | 20.0 | 6.8 | 27 3/4 | 34.00 | 22.5 | 1.36x | 103.12 | 2.88 3.87 | 8. $7 x$ $8.8 x$ | 200 | 312 210 |

(a) Deficit for previous 16 weeks.
(b) S\&P 500 Index.
(c) Based on fully diluted earninga from continuing operations; net EPS including discontinued operations was $\$ .70$ for fiscal year ended $11 / 30 / 75$
(d) The initial purchase price of $\$ 29.17$ per share was adjusted to roflect a $20 \%$ stock dividend paid by Veeder on $11 / 1 \mathrm{~s} / 74$.
(e) Merger completed in 1977.
(f) Merger completed on $5 / 3 / 76$ through exchange of 1.125 Emhart ahare ( $\$ 29.39$ ) for each USM share, market value of the offer equaled approximately $\$ 50$ million
(g) Merged remaining shares on $4 / 6 / 76$ at $\mathbf{f}$ purchased.
(g) Merged remaining shares on $4 / 6 / 76$ at aame price.
(h) Balance acquired on $5 / 15 / 75$ for $\$ 75.6$ million or $\$ 46$ per share.
(i) By $8 / 19 / 77$ had acquired $81 \%$ of shares and tendered for remaining $19 \%$ at $\$ 10,00$ per share.

## Summary Comments on Selected Multiple-Stage Acquisitions

## Cavenham/Grand Union

In November 1973, Cavenham made an initial purchase of about $50 \%$ of Grand Union at $\$ 19$ pershare. Twenty-four months later, Cavenham offered to purchase an additional $30.6 \%$ through an exchange of $\$ 18$ principal amount of debentures with a market value of $\$ 15.30$. A comparison of the two offers indicates the following changes from the initial purchase:

Bid:
Target's Stock Price:
E.P.S.:

S \& P Index:

Declined 20\%
Unchanged
Shifted to a deficit
Declined

## General Cigar/Helme Products

In May 1975, a majority of Helme's board recommended approval of a merger with General Cigar. However, on June 9, Helme's board announced opposition to the merger. Subsequently, General Cigar announced a cash tender at $\$ 13$ which after discussions was increased to $\$ 13.25$. Approximately $86 \%$ of the shares were acquired. Two months later, General Cigar offered to exchange subordinated debentures with fair market value of $\$ 13.25$ for each remaining share. A comparison of the two offers shows the following changes from the initial purchase:

| Bid: | Unchanged <br> Target's Stock Price: <br> E.P.S.: |
| :--- | :--- |
|  | Declined $9 \%$ <br> Continuing deficits (after <br> providing for discontinued <br> operations) |
| S \& P Index: | Declined $10 \%$ |

## Emhart/USM

In July 1974, Emhart purchased $30 \%$ of USM's shares directly from Allegheny Corp. for $\$ 31,000,000$ ( $\$ 25$ per share) consisting of a package of cash and investment securities. Fourteen months later, Emhart tendered for an additional $24 \%$ of USM at $\$ 23.00$ per share. A comparison of the two offers indicates the following changes from the initial purchase:

| Bid: | Declined $8 \%$ |
| :--- | :--- |
| Target's Stock Price: | Declined $2 \%$ |
| E.P.S.: | Increased $3 \%$ |
| S\&P Index: $\quad$ | Increased $7 \%$ |

## Pechiney Ugine Kuhlmann/Howmet

In October 1973, Pechiney, which already owned 55\% of Howmet, tendered for an additional $9.3 \%$ at $\$ 21.50$. Tiventyone months later, Pechiney tendered for all of the remaining shares at $\$ 19.00$. A comparison of the two offers indicates the following changes from the initial purchase:

| Bid: | Declined 12\% |
| :--- | :--- |
| Target's Stock Price: | Declined $8 \%$ |
| E.P.S.: | Increased $54 \%$ |
| S \& P Index | Declined $15 \%$ |

## Universal Food Specialties (Nestle)/Libby, McNeill

In May 1975, Nestle Alimentana, through a subsidiary. tendered for the balance ( $39 \%$ ) of the Libby shares which had not been previously acquired through a tender offer in 1967 and subsequent purchases principally pursuant to a subscription offer in 1970. The offering price of $\$ 81 / 8$ represented a market premium of $67 \%$ over the previous closing price.

## Vickers Energy (Esmark)/Transocean Oil

In April 1970, Esmark, through a subsidiary acquired a $51 \%$ interest in Transocean for $\$ 83$ million ( $\$ 12.81$ per share) through the direct purchase of newly-issued shares in conjunction with the spinoff of Transocean from J. Ray McDermott. Four and one-half years later, in September 1974, Esmark tendered for the balance at $\$ 12.00$ a share. The bid price in the second purchase was $6 \%$ below the initial purchase price. Stock price and E.P.S. data on Transocean immediately after the spinoff is not readily available.

## International Minerals \& Chemicals/Commercial Solvents

In March 1974, International Minerals made a bid for $23 \%$ of Commercial Solvents at $\$ 30.00$ per share shortly after Beker Industries had filed a tender offer which was opposed by Commercial Solvents' management. 'Approximately $37 \%$ of the shares were tendered, and three months later, a second offer for an additional $9 \%$ was made at the same price of $\$ 30.00$. A comparison of the two offers indicates the following changes during the interim three months:

| Bid: | Unchanged |
| :--- | :--- |
| Target's Stock Price: | Increased $4 \%$ |
| E.P.S.:- | Increased $33 \%$ |
| S\&P Index: | Declined $12 \%$ |

## Thyssen-Bornemisza/Indian Head

In September 1973, Thyssen made its initial purchase of approximately $34 \%$ of Indian Head through a tender for $20.6 \%$ at $\$ 27$ per share and a simultaneous direct purchase of new shares ( $13 \%$ ) from the Company. Ten months later. Thys sen tendered for the balance at the same price of $\$ 27.00$ per share and received all but $10 \%$ of the outstanding shares. In February 1976. Thyssen announced it would offer to purchase the remaining shares at a price of $\$ 30.00$. A comparison of the three offers is indicated below:

|  | From 1st to 2nd Offer |
| :--- | :--- |
| Bid: | Unchanged |
| Target's Stock Price: | Increased. $10 \%$ |
| E.P.S.: | Increased $4 \%$ |
| S\& P Index | Declined $23 \%$ |

From 2nd to 3rdOffer
Increased 11\%
Increased 6\%
Increased 20\%
Declined 6\%

## United Brands/Foster Grant

Prior to its initial tender offer in May 1973 for $14 \%$ of Foster Grant at $\$ 25.00$ per share, United Brands had purchased $34.6 \%$ of the shares privately from major shareholders at $\$ 34.00$ a share and an additional $5.2 \%$ at prices ranging from $\$ 19.75$ to $\$ 32.50$. Eleven months later, a second offer was made for an additional $20 \%$ at $\$ 34.00$ per share. A comparison of the two offers indicates the following changes from the initial tender offer:

$$
\begin{array}{ll}
\text { Bid: } & \text { Increased } 36 \% \\
\text { Target's Stock Price: } & \text { Increased } 79 \% \\
\text { E.P.S.: } & \text { Increased } 34 \% \\
\text { S \& P Index } & \text { Declined } 10 \%
\end{array}
$$

## Gulf + Western/Brown Co.

In May 1973, Gulf + Western already owned $53 \%$ of Brown when it tendered for an additional $12 \%$ at $\$ 10.75$. Twelve months later, another tender offer for an additional $5.7 \%$ at $\$ 12$ per share was made. A comparison of the two offers indicates the following changes from the 1973 offer:

| Bid: | Increased $12 \%$ |
| :--- | :--- |
| Target's Stock Price: | Increased $7 \%$ |
| E.P.S.: | Increased $86 \%$ |
| S \& P Index: | Declined $11 \%$ |

## Gulf + Western/Madison Square Garden

In November 1973, Gulf + Western owned $20 \%$ of Madison Square Garden (MSG). when it offered to purchase an additional $21 \%$ at $\$ 7$ per share. Seven months later, a tender for an additional $5 \%$ was made at $\$ 6.75$ per share. A comparison of the two offers indicates the following changes during the seven-month period:

| Bid: | Declined 4\% |
| :--- | :--- |
| Target's Stock Price: | Unchanged |
| E.P.S.: | Increased $4.75 \times(0.38$ |
| S \& P Index: | vs. 0.08) |
|  | Declined $7 \%$ |

Selected Lehman Brothers Opinions and Valuations

| Client | Service Rendered | Gross Fee | ```Value of Transaction``` | Gross Fee as $\%$ of Trans- <br> action Value |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | (\$ millions) |  |
| 1976 |  |  |  |  |
| Bank of Commonwealth | Opinion as to the fairness of a recapitalization plan | \$200, 000 | \$ 10 | 2. $00 \%$ |
| Colgate-Palmolive | Opinion as to the fairness of the terms of Colgate's acquisition of Riviana | \$200,000\% | \$190 | . $10 \%$ |
| Houston Natural Gas | Proxy opinion as to the fairness of the terms of Houston's tender for Empire Energy | \$ 75,000 | \$ 25.5 | . $29 \%$ |
| Libby, McNeil \& Libby | Opinion as to the fairness of the terms of Nestle Alimentana's tender for Libby | \$ 75,000 | \$ 24 | . $31 \%$ |
| Marcor | Opinion as to the fairness of the merger of Mobil Oil and Marcor | \$1, 200, 000* | \$874 | . $14 \%$ |
| Quaker State Oil Refining Co. | Proxy opinion as to the fairness of the terms of a tender for Valley Camp Coal Co. | \$250, 000 | \$ 58.4 | . $43 \%$ |

* Fee includes other services in addition to the above stated.

| Client | Service Rendered | Gross <br> Fee | Value of Transaction | Gross Fe <br> $\%$ of Tran <br> action Va |
| :---: | :---: | :---: | :---: | :---: |
| Veeder Industries | Proxy opinion as to the fairness of the merger with Western Pacific Industries | \$100, 000 | (\$ millions) | . $45 \%$ |
| 1975 |  |  |  |  |
| USIF, Real Estate | Valuation of various Arlen Realty \& Development Corp. subsidiaries | \$700,000\% | \$160 | . $43 \%$ |
| Amerada-Hess Corp. | Opinion as to the fairness of the Amerada Petroleum Corp. - Hess Oil and Chemical Company merger | \$100,000 | - | - |
| Copperweld Corp. | Valuation of common stock of Copperweld Corp. in connection with tender offer by Societe Imetal | \$200,000* | \$ 73 | . $27 \%$ |
| American General Insurance Co. | Valuation of South Padre Development Company | \$ 25, 000 | n. m. | n. m. |
| General Crude Oil Company | Valuation of General Crude Oil Co. in connection with International Paper's acquisition of General Crude | \$585,000* | \$486 | . $12 \%$ |
| McClatchy Newspapers, Inc. | Valuation of McClatchy Newspapers, Inc. common stock for estate tax purposes | \$ 25,000 | n.m. | n. m. |

[^8]
## Gross

Fee

Value

Sammons Enterprise Inc.

Planet Oil and Mineral Corp.

Anaconda Company

Valuation of Sammon's common stock in connection with the tested valuation of options to buy Sammon's stock

Opinion as to the fairness of Sabine Royalty Corp. 's acquisition of Planet Oil and Mineral Corp.

Opinion as to the fairness of Anaconda's acquisition of the Walworth Division of International Utilities

## 1974

Ridder Publications Inc.

American President Lines

Opinion as to the fairness of the Knight Newspapers Inc. - Ridder Publications Inc. merger

Valuation of American Mail Line common stock in connection with acquisition by American President Lines
\$125, 000
$\$ 93$
$.13 \%$
$\$ 20,000$
$\$ 8$
$.25 \%$
$\$ 250,000$
$\$ 40$
$\$ 115,000$
$\$ 98$
$.11 \%$
$\$ 40,000$
$\$ 2$
2. $00 \%$

## Gross <br> Fee

## Value

J. C. Bamford Group
Hoskins Manufacturing Company

## Marcor Inc.

## Zapata Corporation

Valuation of J. C. Bamford Group for tax purposes

Opinion as to the fairness of Hoskins merger with Armada Corp.

Opinion as to the fairness of Mobil Oil's tender offer for Marcor common stock

Opinion as to the fairness of the terms and conditions of Zapata's tender offer for Granby Mining Company

Opinion as to the fairness of Rubinstein merger with ColgatePalmolive Co.

Valuation of Cenco Inc. convertible debentures for tax purposes

Valuation of Hillenbrand common stock for tax purpose
n.a. - not available
n.m. - not meaningful

| American Research \& Develop- <br> ment | Opinion as to the fairness of <br> AR\&D merger with Textron, Inc. | $\$ 150,000$ | $\$ 65$ |
| :--- | :--- | :--- | :--- |
| Kelco Co. | Opinion as to the fairness of <br> Merck \& Co. Inc:'s acquisition <br> of Kelco | $\$ 250,000$ | $\$ 90$ |

## Five-Year Summary of Company's Operations in Different Industries

|  | Thousands of Dollars Years Ended December 31 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1973 | 1974 | 1975 | 1976 | 1977 |
| Revenues |  |  |  |  |  |
| Petroleum \& petrochemical | \$ 81,328 | \$ 93,729 | \$101,463 | \$104,633 | \$120,724 |
| Construction | 188,460 | 300,051 | 186,474 | 187,418 | 154,562 |
| Fabricated metal products | 198,219 | 227,221 | 183,764 | 191,712 | 220,333 |
| Transportation equipment | 50,685 | 62,565 | 68,200 | 94,459 | 115,305 |
| Chemical and plastics | 56,940 | 77,378 | 64,979 | 86,574 | 105,186 |
| Other products | 25,187 | 20,059 | 10,166 | 12,245 | 13,768 |
| Total | \$600,819 | \$781,003 | \$615,046 | \$677,041 | \$729,878 |


| Income (Loss) From Continuing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Operations Before Income Taxes |  |  |  |  |  |
| and Extraordinary Items - |  |  |  |  |  |
| Petroleum \& petrochemical | \$ 13,688 | \$ 18,949 | \$ 18,280 | \$ 20,895 | \$ 22,730 |
| Construction. | 2,646 | (486) | $(3,597)$ | 2,293 | 1,259 |
| Fabricated metal products | 16,825 | 20,578 | 17,835 | 12,158 | 16,301 |
| Transportation equipment | $(1,469)$ | 1,461 | 3,332 | 17,799 | 13,215 |
| Chemical and plastios | 6,984 | 10,224 | $(1,172)$ | 2,288 | 8,476 |
| Other products | 3,776 | 3,478 | $(4,941)$ | $(3,647)$ | $(4,565)$ |
| Total | 42,450 | 54,204 | 29,737 | 51,786 | 57,416 |
| General corporate expenses | $(15,692)$ | $(16,694)$ | $(14,083)$ | $(15,784)$ | $(12,616)$ |
| Corporate interest expense-net | $(2,955)$ | $(4,572)$ | $(7,570)$ | $(7,166)$ | $(4,949)$ |
| Income from partially owned subsidiaries | 1,310 | 2,446 | 577 | 331 | 1,906 |
| Writeoff of receivables | - | - | (34,391) | - | - |
| Total | \$ 25,113 | \$ 35,384 | \$ $(25,730)$ | \$ 29,167 | \$ 41,757 |


| Total Assets |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Petroleum and petrochemical | \$ 59,298 | \$ 73,669 | \$ 93,339 | \$ 93,682 | \$ 97,020 |
| Construction | 72,407 | 82,567 | 71,850 | 68,247 | 85,519 |
| Fabricated metal products | 85,010 | 96,634 | 89,685 | 91,517 | 100,183 |
| Transportation equipment | 33,926 | 50,865 | 52,994 | 55,048 | 66,845 |
| Chemical and plastics | 26,492 | 41,123 | 46,023 | 46,845 | 52,759 |
| Other products | 18,416 | 17,865 | 21,527 | 22,024 | 21,235 |
| Total identifiable assets | 295,549 | 362,723 | 375,418 | 377,363 | 423,561 |
| Investment in non-consolidated subsidiaries | 11,522 | 10,872 | 10,076 | 10,090 | 11,234 |
| Corporate assets and research facilities | 45,304 | 47,409 | 42,366 | 77,617 | 73,468 |
| Assets of discontinued Fragrances Group | 28,428 | 36,836 | 27,684 | - | - |
| Total assets | \$380,803 | \$457, 840 | \$455,544 | \$465,070 | \$508,263 |

## Consolidated Statement of Income



The accompanying notes to consolidated financial statements are an integral part of this statement.

## Consolidated Balance Sheet

| Assets | Thousands of Dollars December 31 |  |
| :---: | :---: | :---: |
|  | 1976 | 1977 |
| Current Assets. | (Restated Note 10) |  |
| Cash | \$ 28,299 | \$ 35,415 |
| Marketable securities, at cost which approximates market | 25,653 | 37,563 |
| Receivables (principally trade accounts), less reserves of \$2,351 in 1976 and $\$ 4,967$ in 1977 (Note 4) | 134,899 | 138,917 |
| Costs of uncompleted contracts in excess of related billings (Note 4) | 321 | 346 |
| Inventories (\$28,919 in 1976 and $\$ 32,055$ in 1977 valued at last-in, first-out cost) <br> (Notes 1 and 11) | 80,963 | 101,324 |
| Prepaid expenses | 4,681 | 7,103 |
| Prepaid and refundable income taxes (Note 7) | 11.371 | 12,743 |
| Total current assets | \$286, 187 | \$333,411 |
|  |  |  |
| Plant and Equipment, at cost (Notes 5, 10 and 11): |  |  |
| Land and timber | \$ 11,487 | \$ 11,157 |
| Buildings | 90,175 | 91,829 |
| Machinery and equipment | 159,553 | 170,975 |
| Construction in progress | 9,826 | 8,621 |
|  | \$271,041 | \$282,582 |
| Less-accumulated depreciation. | 126,415 | 137,176 |
| - | \$144,626 | \$145,406 |
| Other Assets: |  |  |
| Investments in nonconsolidated partially owned subsidiaries, at underlying book value (Note 9) | \$ 10,090 | \$ 11,234 |
| Goodwill, at cost less amortization (Note 11) | 2,250 | 1,807 |
| Patents, at cost less amortization (Note 11) | 2,671 | 2,285 |
| Deferred charges, etc. (Note 11) | 7,440 | 4,909 |
| Noncurrent receivables | 11,806 | 9,211 |
|  | \$ 34,257 | \$ 29,446 |
|  | \$465,070 | \$508,263 |

## Consolidated Balance Sheet

| Liabilities | Thousands of Dollars December 31 |  |
| :---: | :---: | :---: |
|  | 1976 | 1977 |
| Current Liabilities: | (Restated Note 10) |  |
| Bank loans (Note 5) | \$ 2,380 | \$ 1,571 |
| Current maturities of long-term debt (Note 5) | 4,878 | 6,427 |
| Accounts payable | 55,281 | 58,047 |
| Accrued liabilities (Notes 3 and 11) | 54,760 | 63,758 |
| Billings on uncompleted contracts in excess of related costs (Note 4) | 21,634 | 35,116 |
| Income taxes (Note 7) | 9,669 | 5,663 |
| Total current liabilities. | \$148,602 | \$170,582 |
| ng-Term Debt and Lease Obligations, less current maturities shown above (Notes 5 and 10) | \$ 89,382 | \$ 84,799 |
| Deferred Income and Liabilities: |  |  |
| Contracts payable | \$ 6,102 | \$ 6,668 |
| Deferred income | 10,243 | 9,049 |
| Deferred income taxes (Note 7) | -7,039 | 9,251 |
|  | \$ 23,384 | \$ 24,968 |
| Commitments and Contingent Liabilities (Notes 2 and 10) |  |  |
| Stockholders' Equity (Notes 5 and 8): |  |  |
| Preferred stock, no par value; authorized 1,500,000 shares; none issued | \$ | \$ |
| Common stock, par value $\$ 1.00$ per share; authorized $15,000,000$ shares; issued 11,631,379 shares at December 31, 1976 and 11,637,429 at December 31, 1977 | 11,631 | 11,637 |
| vapital surplus | 131,754 | 131,843 |
| Retained earnings | 62,817 | 87,081 |
|  | \$206,202 | \$230,561 |
| 158,215 shares at December 31, 1977 | 2,500 | 2,647 |
|  | \$203,702 | \$227,914 |
|  | \$465,070 | \$508,263 |

[^9]to the servant was sufficient to maintain the action against the muster，：s：：＂ subsequent deranad and refusal；so the plaintiff had a verdict（1）．
（1）Cary v．Webster，ante，480．See the next case．

## Armory tets．Dflamirie

## In Middlesex coran Pratt C．J．








Finter of a jevel may maintain trover．
The plaintiff being a climatey sweuper＇s by fomd a juwel and an in 1 defeadant＇s shop（who was a gödemith）to know what it was，and defi：－ tho bands of tho npirentice，who under pretence of weighing it，twok ．n：t ：
 offered the boy the meney，who refused to take it，and insisted th hatse＇s
 And now in trover against the naster these points were ruled：

1．That the fimler of a jewel，though he does not by such fimling ate： absoluto property or ownership，yet be has such a propercy as will anable bin： it against all but the rightful owner，and consequently may mantan trover．

2．That tho uction well lay against the master，who gises it crelit $t$ ． apprentice，and is answerable for bis neglect（1）．

3．As to the value of the jewel several of the trade were examined to pruve $w$ a jewel of the finest water that would fit the socket wonld be woth；anil th：（＇： Justice directed the jury，that unless the deientant did profince the jewel，and s： it not to be of the finest water，they should presume the strongest urainet hina．： make the value of the best jowels the measure of their damages：which thay aci： ingly did．
（1）Jones v．Mart，Salk．441．Cor．Holt C．J．JTead v．Hamond，supra．Grat： v．Nixon，post， 653.

## ［506］Towers vets．Sir Joliv Osborne．

At Guildhall coram Pratt C．J．
［Discussed，Comper v．Elston，1726， 7 T．R．17．］
Fxecutory contracts for goods，not within the Statute of Frands．
Tho defendant bespoke a chariot，and when it was maile refnsed to take ： in an action for the value，it was objected，that they should prove snmethint－ in earnest，or a note in writing，since there wns no delivery of any part ni the：－ But the Cbief Justice ruled this not to be a case within the Stakite of Framh－ relates only to contracts for the actual salo of goods，where tiae inyer is ims：－ answerable，without time given bim by special agreement，and the seller is u．．． the goods immediately（1）．
（1）Simon v．Metivier， 1 Back．599．3 Burr．192ㄴ．Bull．L．N．Y．： Clayton v．Andrews， 1 Burre ：B10l．Alexunder v．Comber； 1 H．Black．At．

COURT OF CHANCERY of the<br>State of Delaware

William Marvel
July 17 , 1979

Court house Wilmington, Delaware

William O. LaMotte, III, Esquire P.O. Box 1347

Steven J. Rothschild, Esquire
12 th and Market Street
Re: Tannetics, Inc. v. A. J. Industrics, Inc., C.A. 5306, Submitted: May 1, 1979.

On April 7, 1977, the merger herc in issue was consummated, under the terms of which Rokk Acquisition Corporation, a wholly owned subsidiary of Rokkor Industries, Inc., a newly formed privatcly owned corporation, was merged into A. J. Industries, Inc. By the terms of such merger the holder of each outstanding share of A. J. Industries \$2 par value stock, who participated in such merger, had such equitable interest converted into the right to receive $\$ 5$ in cash, A.J. Industries thereafter becoming a wholly owned subsidiary of Rokkor.

The petitioner, Tannetics, Inc., a substantial stockholder of A. J. Industries, having elected to have its shares excluded from the merger and having perfected its appraisal rights under the provisions of 8 Del. C. Section $262,{ }^{1}$ has brought this action for a determination of the intrinsic valuc of its 435,183 shares of A. J. Industries stock, which it had acquired during 1974 at an average cost of $\$ 2.03$ per share.

At the time of the merger in issuc A. J. Industrics was a conglomcrate of moderate size which owned several parcels of real estate as 1

This section, as amended, provides that the Court make the appraisal here required, the office of a Court appointed appraiser having been eliminated.
well as six wholly owned operating subsidiary corporations, namely Sargent-Fletcher Company, Reyco Industries, Inc., Roberts-Gordon Appliance Corporation, Impco Carburetion, Inc., Fleetwood Metals, Inc., and Armstrong Products Company. Such subsidiaries were engaged principall: in the manufacture of products having to do with transportation, metal parts, and for use in so-called better living devices.

For more than twenty years prior to the merger in issue A. J. Industries had been acquiring and disposing of a number of different businesses so that by the end of the 1960's, A.J. Industries had acquired a then total of some thirty businesses. Most of these enterprises, however, were not successful, and by 1975 A . J. Industries had divested itself of all but the subsidiaries listed above.

Tannetics' main contention is that the basic assets of A. J. Industries are the shares of stock which it owns in each of its wholly owned subsidiaries and that the total value of such stock in each such subsidiary is the amount for which each subsidiary could be sold as a going business. This value was allegedly fixed when each such subsidiary was separately incorporated and when such a subsidiary's stock rather than its plant and fixtures were sought to be used as borrowing collateral. This contention is based upon the fact that the asset value factor in an appraisal is a "*** theoretical liquidating vlaue to which the share would be entitled upon the company going out of business.", Tri-Continental Corporation v. Battye, hel. Supr., 74 A. 2 d 71 (1950). Furthermore, it is argued, on the authority of Poole v. N. V. Deli Yaatschappij, Del. Supr., 243 A. 2d 67 (1968), that the liquidation value of cornorate assets is the equivalent of their fair market value. However, the first question to be dealt with at this juncture is how may a conglomerate best be liquidated.

Tannetics concedes that theoretically a conglomerate such as A.J. Industries can be liquidated on a breakdown basis, that is to say by selling its parcels of real estate, plants and equipment, and the other physical assets of its subsidiarics on a piece by piece basis. However, petitioner contends that a conglomerate is more readily susceptible to orderly liquidation through the sale of the shares of stock owned by it in each of its subsidiaries, and in a situation in which the stock owncrship held by A. J. Industries in each such subsidiary is $100 \%$, a sale of an entire subsidiary as a separate viable business could be readily effected. In this manner, it is contended, all elements of value going towards a fixing of a fair market price, including the intangible value attached to each subsidiary as a whole, would not be lost as would be in the case of a liquidation on a breakdown basis, inasmuch as the value of a whole is gencrally greater than the value of its separate parts. Accordingly, petitioner contends that since the subsidiaries here involved are wholly owned and thereby susceptible to indcpendent valuation and sale, and are in fact the sole assets of A. J. Industries, they could thus be valued and sold for their highest price and best use, the net value of A. J. Industries' assets being equal to the sum total of the fair market value at which each subsidiary could be sold as a going business.
A. J. Industrics rejects Tannetics' asset concept and valuation approach, characterizing the latter's contention as an attempt to place A. J. Industries in the category of an investment trust or mutual fund, the method of valuation sought to be applied being akin to that used in investment banking. A.J. Industries, however, looks on itself as a metal manufacturing company which has acquired subsidiaries for the purpose of generating new sources of revenue and not for the purpose of reselling such
properties for the purpose of ultimately realizing capital gains. Accordingly, A. J. Industries contends that the fact that it is a conglomerate is irrelevant in this appraisal action, and that as in the case of arriving at the net asset value of any operating company, a determination must be made of the fair market value of its assets, namely that of its real property, as well as that of the plants and equipment of each of its subsidiaries arrived at on a breakdown basis.

Tannetics' argument, at first glance, commands attention, namely that a modern conglomerate is more readily and profitably liquidated through the sale of the shares of stock which it owns in each of its subsidiaries, and that therefore the value of the assets of a conglomerate are to be found in the value of the shares of stock which it owns in each subsidiary rather than in the plant and equipment of each such. subsidiary.

I conclude, after due deliberation, that if A. J. Industries' ownership of the stock of each of its subsidiaries were less than $100 \%$, Tannetics' argument would be more convincing. However, the sale of the shares of stock of each subsidiary, when sold to a single purchaser, would effect the sale of each subsidiary as a single viable entity, and it would appear to follow that such a sale would include some other greater value over and above that of the aggregate value of all of its shares, namely a going concern value.

First of all, the valuation of stock on a going concern basis is the ultimate objcctive of an appraisal proceeding, Tri-Continental Corporation v. Battye, Del. Supr., supra, and in arriving at this result, consideration is to be given to the net asset value of the stock involved, it being settled in Delaware that net asset value is the equivalent of theoretical liquidation value, or, in other words, the
value of corporate assets on the basis of a fair market value as of :he date of merger, Poole v. N. J. Deli Matschappij, supra, ${ }^{2}$ or, stated another way, "....the value to which the share [being appraised] would be entitled upon the company going out of business.", TriContinental Corp. v. Battye, supra. Accordingly, the fair market value of corporate assets constitutes the value of the total of its physical assets as distinguished from the value of the business itself, namely its going concern value, see Poole v. N.J. Deli Matschappij, supra, in which the Supreme Court of Delaware noted:
"An appraisal of going-concern asset value requires an allowance for an intangible - an addition to or subtraction from the value of the physical property - for the proved capacity or incapacity of the property to operate and to earn. It represents value of the business as distinguished from value of the plant; it involves earning power and financial condition of the corporation; it is often computed by adding or subtracting an allowance based on a certain percentage of the physical valuation. 2 Orgel on Valuation Under Eminent Domain (2d Ed.) 37-44, 120-141, 235-236.'

*     *         *             *                 * 

"Obviously, going-concern asset value is comparatively an ethereal concept, and the appraisal thereof is a highly speculative and conjectural process. We are satisfied that fair market value, so well formulated in the law of eminent domain, furnishes a more concrete and workable rule for appraisers, lawyers, and judges. Any allowance for earning power of the assets or value of the business, deemed necessary under the circumstances of a given case, is best left to the court's consideration of earnings as an independent

Fair market value has been defined in the cited case for appraisal purposes as the price which would be agreed upon by a willing seller and a willing buyer under usual and ordinary circumstances, after consideration of all available uses and purposes, without any compulsion upon the seller to sell or upon the buyer to buy.

## elcment of stock value and to the court's

 exercise of the weighting function."Tannetics recognizes that a sale of all of the stock of a particular subsidiary to a purchaser would necessarily involve the transfer of all elements of ownership, including the going concern value represented by such stock. However, it contends that the necessary inclusion of all elements of value in the market price that could be obtained for the subsidiary is far different from the going concern asset value approach rejected in the cited case. Tannetics reasons, however, that since net asset value is a theoretical liquidating value and the same as fair market value, any going concern element included therein would be realizable upon a theoretical liquidation, whereas the value of the assets to the corporation owning them would not be realizable on a theoretical liquidation and therefore cannot properly be made the basis for valuation of corporate assets. While I agree that stock itself can, of course, be an asset, the case from which such principle derives is namely distinguishable from the case at bar,/Tri-Continental Corporation $v$. Battye, supra, in which the corporation involved was a closed-end investment company with leverage, engaged in the business of investing in the stock market generally in an endeavor to acquire and hold a cross-section of the market, investments being made primarily from the view of capital appreciation. Whereas here, $\Lambda$. J. Industries is not engaged in the busincss of acquiring and holding a cross-scction of the stock market with readily liquid, diversified investments, but rather concerned with acquiring a $100 \%$ ownership of various businesses for the purposes of acquiring capital and increasing such acquisitions' earnings.

Furthermore, I fail to see the distinction sought to be made between the going concern values of $A$. J. Industries' subsidiaries and the going
concern value of A. J. $\therefore$ Industries itself, since such corporation does not manufacture, produce or engage in any activity other than holding and oversceing the asscts of its subsidiaries, the going concern value of A. J. Industrics being nothing more than the collective going concorn values of its subsidiaries. Accordingly, I cannot accept Tannetics' contention regarding the assets of the conglomerate A. J. Industries, and its net asset valuation, believing that a valuation on a breakdown basis is appropriate.

There is disagreement between the parties only as to the valuation of A. J. Industries' real property, both operating and non-operating, as well as of its intangibles which include a number of patents and. government contracts. The values of other assets have been agreed to by stipulation. A. J. Industries' own evaluations and those of American Appraisal, which undertook valuation of the real property on behalf of Tannetics, are corroborative of one another and are therefore accepted for purposes of this appraisal. The total market value of the Industries various non-operating real properties of A. J./may therefore be fixed at $\$ 10,534,000$. This value includes the contract value of $\$ 4,500,000$ on the Oceanside, California property because what could be more indicative of the market value of real estate than a purchase agreement for such property. Also included are the values of mineral rights of both the Mariposa and Sonora properties which contain substantial ore rescrves. The value of the operating real property of $\Lambda$. J. Industries on the other hand, is $\$ 7,811,000$, bringing the aggregate real property value for A. J. Industries to a total of $\$ 18,345,000$.

There is, however, disagreement over the value of intangibles, specifically, the value, if any, of certain government contracts and patents held by several of the subsidiaries. A. J. Industries contends that no dollar value can be placed upon them, whereas Tannetics valucs
them at $\$ 1,263,000$. I conclude that there is value in such contracts and patents capable of estimation. However, I am not convinced that the value of the contracts is as high as Tannetics claims. The contracts, for appraisal purposes, were placed into five categories: the first included only those contracts in effect on March 31, 1977 ( $\$ 400,000$ ); the second included a contract which while not yet awarded, market dominance virtually assured its award (\$295,000); the third included higher risk contracts than the first two categories ( $\$ 293,000$ ) and; the fourth and fifth categories included contracts which are considered too speculative to value. Contracts which present a higher risk than those of category number two strike me as being too speculative for. valuation. Therefore, the $\$ 293,000$ of category three will be deleted bringing the total value of the contracts to $\$ 695,000$.

The patents also have a certain worth and are capable of valuation. In view of the fact, however, that American Appraisal's figures are preliminary valuations only, I will select the conservative end of the range of values estimated by them. Therefore, I will assign a value of $\$ 200,000$ to these patents. The total amount of intangibles therefore is $\$ 895,000$.

The assets of A. J. Industries on a breakdown basis are accordingly found to be as follows:

| Category | Value |
| :--- | :---: |
| Cash and Cash Equivalents | $\$ 9,301,000$ |
| Accounts Receivable | $\$ 10,769,000$ |
| Inventory | $\$ 12,862,000$ |
| Real Property | $\$ 18,345,000$ |
| Machinery and Equipment | $\$ 4,682,000$ |
| Intangibles | $\$ 895,000$ |
| Miscellaneous Assets | $\$ 8318,000$ |
|  | Total |
|  | $\$ 57,172,000$ |

When combined with the stipulated amount of liabilities, $\$ 14,417,000$ the net asset value is accordingly $\$ 42,755,000$. The per share net anent valur of surh promerties is therefore $\$ 8.38$.

Tannetics contends a weight of $60 \%$ is appropriate for such assets arguing : $\therefore$ that $A$. J. Industries as a conglomerate is similar to a holding company and therefore that the value of the corporation lies in the mere possession of its subsidiaries and investments. The reciprocal view of this situation is that the intrinsic value of a single business manufacturing company lies in its ability to generate future earnings from operations and not from the mere possession of ssets, a situation which compels a conclusion that asset value be accorded a relatively low weight. A. J. Industries accordingly submits that no more than a $171 / 2 \%$ weight be assigned to such assets.

Although the assets of A. J. Industries have been valued on a , , breakdown basis, as opposed to a valuation of the separate subsidiaries as independent entities, this does not mean that the weighting of this factor should necessarily reflect that generally accorded to a single business manufacturing corporation. However, in view of the conglomerate nature of A. J. Industries and its $100 \%$ ownership of its subsidiaries I conclude that fairly significant weight must be assigned to net asset value, the intrinsic value of $A$. -J. Industries being found in the collective value of its subsidiaries. Thus, the mere possession and ownership of the present collection of subsidiaries creates a value which in this case can only be reflected in the weighting of the net asset value factor. Therefore, in order to accord Tannetics the intrinsic value of its stock which the merger might otherwise . deprive it of. a weight of $45 \%$ will be accorded to the net asset value factor of $\$ 8.38$, thereby reducing the figure to $\$ 3.771$ per share. The case of In Re Gencral Realty $\mathcal{\&}$ Utilities Corporation, Del. Ch., 52 A. 2d 6 (1947) is somewhat analogous. In the cited case, the original business was to make construction loans, purchase property for resale,
and to erect buildings for investment or resale. However, such corporation underwent a change of business purpose due to the depression of the 1930's. Thereafter, its business consisted chịefly of owning, holding and operating office buildings, apartment houses, store properties and hotels through subsidiary corporations. General Realty's sole income being derived from these various subsidiary operations, its assets were given a weight of $50 \%$.

As in the cited case, circumstances have required a change in
J. Industries' business operations, which apparently began with the installation of Mr. O'Keefe as president in 1974. Theretofore, A. J. Industries had been following a program of acquisition and sale of. subsidiaries. Under Mr. O'Keefe's leadership, by the time of the merger, the conglomerate had been reduced to the six subsidiaries involved here, whose purpose thereafter was to produce income rather than the holding of businesses for resale, its income thereafter consisting solely of that derived from the operations of its various subsidiaries. Therefore, I conclude that a weighting of $45 \%$ to assets is appropriate.

Tannetics and A.J. Industries are in basic agreement as to the amount of earnings per share for the latter's stock for the five fiscal years preceding the merger date ${ }^{3}$, however, they differ as to the method to be used to calculate the latter's earnings value. Tannetics contends that A. J. Industries essentially became a different corporation after certain managerial changes came about principally as a result of the election of Mr. O'Kecfe as president in 1974, and that these two factors

The carnings (losses) per share for the five ycars inmediately preceding the merger were as follows:

| 1973 | .28 |
| :--- | :---: |
| 1974 | $(.36)$ |
| 1975 | .43 |
| 1976 | .49 |
| 1977 | .72 |

ake an earnings history longer than three years meaningless for the purpose of an earnings' valuation. Furthermore, Tannetics contends that the fiscal year immediately preceding the merger (fiscal year ending $3 / 31 / 77$ ) should be double weighted in computing such average. Earnings so calculated came to $\$ .60$ per share. However, Tannetics then seeks to introduce a factor into the calculation representing a hypothetical redeployment of non-productive assets not needed in any current operation. On the basis of such redeployment of assets, the arnings per share figure was calculated to be approximately $\$ 1.04$ rather than $\$ .60$ per share. Applying the multiplier agreed upon the earnings value per share, according to Tannetics, comes to $\$ 7.28$. A. J. Industries, on the other hand, contends that the earnings per share should be averaged in accord with traditional Delaware precedents, amely for the five fiscal years immediately preceding the merger and when the proper multiplier is thereafter applied, arrive at what is the earnings value for A. J. Industries'stock. According to such calculations, $\$ .31$ is the average per share earnings for the approriate five years and the multiplier should be 7. Accordingly, the earnings value of $A$. J. Industries should be fixed at $\$ 2.17$ per share over the period in question.

The law in Delaware regarding the procedure to be followed to reach an carnings cvaluation is well settled. The earnings for appraisal proposes are to be determined by averaging the corporation's earnings over a reasonable period of time. This determination is based upon historical earnings rather than prospective earnings, and the customary period of time over which to compute such average is ordinarily iixed at the five-year period immediately preceding the merger, Francis I. dupont \& Co. v. Universal City Studios, Inc., Del. Ch., 312 A.2d

344 (1973), aff'd, Universal City Studios, Inc. v. Francis I. duPont § Co., Del. Supr., 334 A. 2 d 216 (1975). The number of years over which the average is taken, however, may be shortened or expanded when appropriate but only in the most unusual situation, Adams v. R. C. Williams \& Company, Del. Ch., 158 A. 2 d 797 (1960). Such an unusual situation does not, in my opinion, exist here, the fact that fiscal year 1977 was the first year in which the benefits of such changes began to evidence themselves, as Tannetics urges, being, in my opinion, an insufficient reason to change the Delaware policy of averaging earnings over the five years immediately preceding the merger. And while it may be true, as Tannetics contends, that 1977 is the most appropriate fiscal year for evaluating A. J. Industries' future prospects, this would affect only the choice of the capitalization factor or multiplier,'and not the period of time over which the earnings are to be averaged. Universal City Studios, Inc v. Francis I. duPont \& Co. supra, and Bell v. Kirby Lumber Corporation, Del. Ch., 395 A. 2d 730 (1978).
A. J. Industries' earnings over the five year period are, in my opinion, representative of the company's performance of a small conglomerate involved in a process of divesting unprofitable businesses in order to improve its financial standing. The adoption of Tannetics' shorter averaging period would reflect only the result of these changes and not the change itself. To do this would be, in my opinion, to distort the meaning of the historical earnings of A. J. Industries. While such corporation perhaps has a new appearance and purpose, A. J. Industries is not a new company. To shorten the averaging period would therefore defeat a purpose behind the practice of averaging earnings
ver a five year period, which is namely to balance any changes or extraordinary profits and/or losses which might otherwise distort the earnings data. It is for these reasons that the use of shorter earnings periods generally are not countenanced, Francis I. duPont \& Co. v. Universal City Studios, Inc., supra.

Taking therefore the average earnings per share for the five years immediately preceding the merger and applying a multiplier of 7 an earnings value for $A$. J. Industries' stock of $\$ 2.17$ per share is arrived (A weight of $40 \%$ will be assigned to this earnings value factor reflecting the fact that although mere possession of its subsidiaries accounts for a large portion of A. J. Industries' intrinsic value, the earnings which those subsidiaries produce is also a significant factor in A. J. Industries' strength and future growth.

The third major value factor to be considered in this appraisal proceeding is the market value of the stock here in issue. Tannetics contends that the market for A. J. Industries stock is unreliable as a measure for arriving at the intrinsic value of the stock in issue and should therefore be given minimal weight, namely $10 \%$. Specifically, they contend as follows: The disclosures of information by A. J. Industries necessary to reach an intelligent opinion as to market value were, according to petitioner, allegedy insufficient, inter alia, to account for having
A. J. Industrics/become an attractive merger/takeover candidate.

In other words, a conglomerate form of business is inherently difficult to value in the market place. Factors such as the absence of sophisticated investors, erratic market price and a low and steadily decreasing ollar volume of trading for $A$. J. Industries' stock all indicate the unreliability of the market place for fixing a value on A. J. Industries' stock as a means of determining its intrinsic value. That these
obstacles to using market value as a test were also recognized by A. J. Industries' management and by Shearson Hayden in its evaluation report, allegedly gives credence to its contention, according to Tannetics.
A. J. Industries contends, on the other hand, that the investing public was kept informed, to the extent possible, of significant developments affecting the company and that. the pre-merger trading in A.J. Industries' stock was in fact free, fair, uncontrolled and relatively active and was therefore a reliable indicator of what the investment community thought a share of A. J. Industries stock to be worth. That value, the latter submits, was $\$ 2.77$ per share, which.was the mean . price for which such shares sold during the thirty days preceding the announcement of the proposed merger. Furthermore, they contend the . narket value should be given a weight of at least $42.5 \%$ since it is through the market place that an investor would most likely receive a return on his investment, Gibbons v. Schenley Industries, Inc., Del. Ch. 339 A. 2d 460 (1975).

For appraisal purposes, the market price for stock subject to an appraisal as here is that which existed immediately prior to the formal announcement of an intention to merge, Levin v. Midland-Ross Corporation, Del. Ch., 194 A. 2d 50 (1963), In Re Olivetti Underwood Corporation, Del. Ch., 246 A. 2d 800 (1968), and Gibbons v. Schenley Industries, Inc., supra. However, the parties differ over whether that value is the average price over a thirty day period immediately preceding the announcement of the proposed merger or whether it is the closing price on the day before the announcement. I conclude that the appropriate larket value is $\$ 3.125$ per share, the closing price for the stock on the day before the announcement of the proposed merger and not a
thirty day pre-announcement average of $\$ 2.77$ per share. Compare Levin v. Midland-Ross Corporation, supra.

I am satisfied, however, that the record supports Tannetics' contention as to the unreliability of A. J. Industries' market price as a value factor, namely that a conglomerate is not easily susceptible to valuation by the market, a factor recognized in Graham, Dodd, Cottle \& Tatham, Securities Analysis, p. 699 (4th ed. 1962), and stocks which have been traded at low market prices, as here, fail to attract the attention of brokers, thereby decreasing investor awareness of the future possibilities of such stocks.

The prices for which A. J. Industries' stock traded during the , year prior to the announcement of the merger was very erratic -ranging from a low of $\$ 1.75$ per share to a high of $\$ 4.00$ per share. Furthermore, $I$ view the following summary of $A$. J. Industries' trading activity by Shearson Hayden not only appropriate but convincing and therefore the Court adopts it as comporting with its views as to the significance of market value here.
"The relative value of trading in A. J. shares together with a number of other factors including a new management group with demonstrated commitment and accomplishment in terms of terminating unsuccessful A. J. enterprises and resolving related disputes, the recent addition to the board of a director experienced in corporate acquisition activities, a recent corporate history of limited dissemination of shareholder information, the relatively brief period of market availability of reported financial results reflecting the improved circumstances of the company, the absence of institutional investor interest in the stock and the fact that the market was unaware of any internal or external prospects of A. J. as a takcover candidate lead us to conclude that the trading prices on the New York Stock Exchange during August were unlikely to reflect fair value of the A. J. common shares. Accordingly, we note the closing price of $\$ 3.125$ per share on August 31, 1976, but would be inclined to discount heavily its significance as an indicator of fair value of A.J. commori stock."

Because I am not satisfied as to its overall reliability here, a weight of $15 \%$ will be assigned to market value of $\$ 3.125$ per share. In summary, the intrinsic value of a share of stock of $\mathrm{A} . \mathrm{J}$. Industries, Inc., exclusive of any value arising from the accomplishment or expectation of the merger, it determined to be as follows:
Value Factors
Value Weight Net Value

Assets
8.38

45\%
40\%
$15 \%$
Value Per Share
3.779
.868
.469
$\$ 5.116$

On notice a form of order may be submitted in accordance with the foregoing.

WM/
c: Register in Chancery


[^0]:    * Regarding the May 1978 Merger vote, there were 11,488,302 shares eligible to vote, of which 5,800,000 (or $50.5 \%$ ) were owned by Signal and $5,688,302$ were owned by other shareholders. Of the shares owned by other shareholders, $3,208,652$ or $56.4 \%$ of the total elected to vote. Of this number $2,953,812$ shares ( $92.1 \%$ of the total) voted in favor of the merger and 254,840 shares ( $7.9 \%$ of the total) voted in opposition to the merger.

[^1]:    Note:

    1) Sources: Prices are from Interactive Data Corporation's data base; earnings and book values are from Standard foor's Compustat Data Base; Earnings and book values for the Dow Jones Industrial Average and the Standard 6 Poor's 400 Industrials are for the year ended December 31, 1977.
[^2]:    Noces: (A) were exchange of common stock is offered, the equivalent value is determined based on the closing price of che acquiror's stock on the day prior to public announcement.
    B) Total consideration for all shares purchased for cash or exchanged for other securities.
    (B) Total consideration for all shares purchased for cash or exchanged for other securities.
    (C) Last trading date prior to first public announcement of merger negotiations of an acquisition offer.
    (D) Primary aet income from continuing operations as set rorth in proxy.

[^3]:    notes:

[^4]:    $l_{\text {The }}$ Chancellor in Lynch v. Vickers Energy Corp., 402 A. 2d 5 (1979) was not required to consider all available remedies in a fairness case. In spite of the full opportunity given to address the issues of fairness, each side chose, nevertheless, to concentrate exclusively on appraisal value. 402 A. 2d at 10. Moreover, the court held that the fiduciary duty present in that tender offer case was not as compelling as in the cash-out merger case. 402 A .2 d at 11.

[^5]:    After Signal took control, in 1975, through Signal's purchase of treasury shares, UOP had accumulated a substantial amount of excess cash. Although the defendants' experts discounted or ignored this element of value, one could be certain that had Signal been approached by a third party to acquire UOP, Signal would have demanded a return of the excess cash they had invested in UOP, quite apart from UOP's going concern value.

[^6]:    *These lands also contained mineral rights which UOP's proxy statement showed was leased to an unaffiliated and unidentified company. (Proxy, p. 22) Like the patents, however, this is another factor about which too little is known. It could add to value, but not detract from it.

[^7]:    **Earnings mix, earnings trend, cash flow, patents, cash, land, comparison with other similar businesses.

[^8]:    * Fee includes other services in addition to the above stated.
    n. m. - not meaningful

[^9]:    The accompanying notes to consolidated financial statements are an integral part of this statement.

