PaineWebber

Destructuring

How less is more in the late 1990s

Highlights

■ Although the corporate raiders of 1980s have passed from the scene, companies will continue to be viewed as portfolios of businesses that should be actively destructured—disassembled and restructured—in order to maximize shareholder values.

■ Why this pattern will continue in the 1990s:
1. Continuing weak profitability will encourage destructuring.
2. Destructuring is contagious; when one firm does it, so must competitors.
3. Destructuring is habit-forming. A firm often does it more than once because the first effort does not boost profitability as much as expected.
4. Large institutional shareholders are pressuring unsuccessful firms to destructure. More active institutional interest in the performance of corporations is widely viewed as beneficial to U.S. competitiveness.

■ PaineWebber analysts assess 18 firms that may boost their stock prices in coming years by destructuring (see Table 1).

■ Many large corporations, including Eastman Kodak, Bristol-Myers Squibb, Paramount, ICI and Johnson & Johnson, could boost their market value by splitting themselves up.

■ Continuing job losses in large firms that are destructuring, plus heavy regulation of small businesses that are the main job creators in the U.S., create the risk of a "job drought" over next few years that could constrain U.S. economic growth.

What was the chief legacy of Michael Milken, Carl Icahn, T. Boone Pickens, Saul Steinberg and the other financiers who restructured corporate America during the 1980s, enriching many shareholders and investment bankers while spreading panic in executive suites? A cynic's answer might be, "The S&L crisis and a pile of junk bonds that collapsed in value once economic growth ebbed." While we are always loath to contradict a fellow cynic, we would add that their legacy had the constructive effect of redefining the corporation as a fluid portfolio of businesses that should be run primarily in the interest of shareholders—not a monolithic, organic institution controlled and operated by top managers in the interests of themselves, other employees and directors. This new approach to corporate governance entails:

1. Minimizing costs, including headcount, to boost profitability.
2. Running the company to maximize profits rather than the firm's size as measured by assets and sales. This

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means not investing in R&D, oil exploration, fancy headquarters buildings, etc. if a good financial payoff is problematic.

3. Selling peripheral businesses that do not fall within the firm's "core competence" (e.g., Kodak should sell Sterling Drug to focus on film). In addition to improving profitability, this move may boost a firm's P/E by eliminating the "conglomerate discount" assigned to diversified companies that are hard for investors to analyze and that always seem to have at least one division with big problems.

4. Maintaining an appropriate level of debt on the balance sheet, to keep the cost of capital low. For companies generating free cash flow, that may mean buying back shares or boosting the dividend.

Table 1

Destructuring candidates

Ahmanson (H F) & Co.	Johnson & Johnson
Ball Corp.	Mark IV Industries
Bangor Hydro Electric	Paramount Communications
Bristol-Myers Squibb	Philadelphia Electric
Champion International	RJR Nabisco
Eastman Kodak	Santa Fe Pacific
Great Western Financial	Tandy Corporation
Household International	Union Pacific
Imperial Chemical Industries	Watkins-Johnson

Restructuring without raiders

The raiders are mostly gone, reviled as personifications of the capitalistic excesses of the 1980s, the "decade of greed." Many people in the Clinton Administration are hopeful that during the 1990s U.S. corporations will no longer be dominated by the short-term interests of financial buccaneers. But the Clintonites will have to contend with this irony: Although the raiders have disappeared, their intellectual legacy survives and will reverberate throughout the U.S. economy in the 1990s. Financial gunslingers are no longer "putting companies into play," but companies are busily restructuring almost as though the takeover threat still existed.

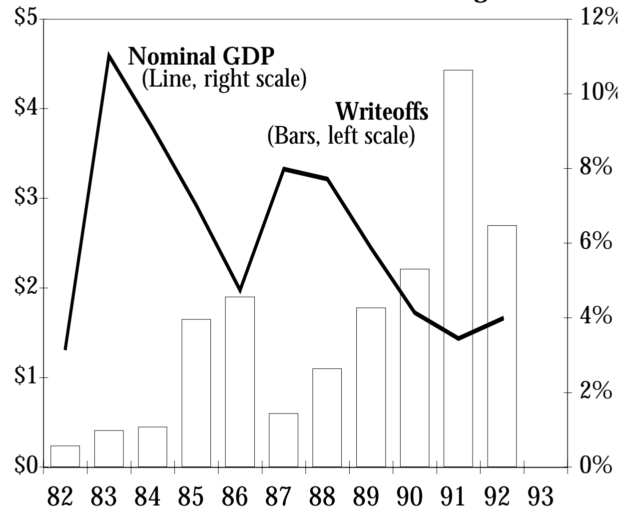
This is so for for several reasons. Giant pension funds and mutual funds that own large, illiquid positions in troubled companies are pressuring boards of directors to improve performance. Directors, in turn, are behaving like the bosses, not the buddies, of top management. This approach receives public support from influential observers such as Harvard Business School professor Michael Porter, who argues that American economic performance will improve if institutional shareholders act more like Warren Buffett and less like George Soros—that is, by being long-term owners of businesses who demand change from laggard managements, instead of merely "voting with their feet" by selling the shares.

Profit pressure encourages restructuring

Another reason why corporate Restructuring continues even in the absence of raiders is that, in the intensely competitive, deflationary environment of the early 1990s, many companies are producing poor financial results. There is nothing like red ink to make managements become creative in looking for ways to cut costs and enrich shareholders. Conversely, when profits are strong there is less pressure to restructure. Thus, it is no accident that the aggregate value of major write-offs by firms in the S&P 500 was particularly low in 1987 and 1988, when business conditions were strong, but increased markedly once the economy began to weaken in 1989 (Chart 1). Destructuring—disassembling and restructuring corporations—will continue at a brisk pace in the next few years because corporate profits will be pressured by these factors, among others:

Chart 1

S&P 500 write-offs and nominal GDP growth



1. The commercial real estate collapse, a disaster not only for many banks and insurance companies but also for certain industrial firms such as Westinghouse.

2. The secular contraction of the defense business, which is being accompanied by a severe cyclical downturn in commercial aerospace.

3. Intense foreign competition for U.S. firms, which was characteristic of the 1980s, shows no signs of abating in the 1990s, what with the emergence of Mexico and China as export powers, increasing exporting of commodities from Russia and other parts of the Soviet

Empire, and slumping domestic demand in Europe and Japan.

4. Rapid technological and regulatory change is also putting pressure on profits. Mainframe computers are fast becoming the new buggy whips; minicomputers are not far behind. The expansion of wireless telephony and the entry of cable TV companies into two-way communications will heighten competition for the RBOCs. Technological change may also lead to strategic alliances between firms in the entertainment and high-technology sectors. The emergence of competition in the electric utility industry will also force restructuring.

5. We are entering a new phase of disinflation during the 1990s that is hitting a whole new set of companies. During the 1980s, disinflation centered on oil producers, miners, heavy industry and the farm belt; the resulting decline in commodity prices was actually a boon to consumers. Now, with consumers being squeezed by slow employment growth, rising taxes and heavy debt loads, disinflation has invaded the consumer sector–the shopping mall, the super market, the drug store and the hospital. For example, these components of the CPI show less inflation today than in the early 1980s:

	Annual increase in price	
	1982-83	**Q3 91 - Q3 92**
Air fares	7.2%	-1.8%
Food at home	2.0	0.7
Household hurnishings	2.4	1.3
Food away from home	4.4	1.6
Personal care	4.7	2.3
Entertainment	4.9	2.3
Alcoholic beverages	3.9	2.6
Tobacco	15.1	8.0

Slow growth and disinflation in the consumer sector has squeezed the profit margins of many food companies, apparel retailers, newspapers, supermarkets and airlines—not to mention the auto industry. Drug companies are next. Many firms in these industries either have or will restructure in order to cut costs and focus on their core business.

Destructuring is contagious. . .

Aside from these economic pressures, another factor is increasing the amount of restructuring: like measles and mumps, destructuring is contagious, because if your competitors do it, you cannot afford not to. Just ask Robert Stempel, late of General Motors. G.M.'s failure to slash costs and revamp operations during the 1980s, the way Ford and Chrysler did, made it particularly vulnerable to the industry slump of the past few years. The same general pattern applies to many other industries. DuPont, Union Carbide and ICI will have to cut costs to compete with lean and mean Dow. Champion International would be well advised to streamline operations the way Weyerhaeuser has. United Technologies and Westinghouse must destructure to keep up with Emerson Electric and General Electric, which reconfigured operations during the 1980s. (Recall the catchy phrase of a G.E. executive, "automate, emigrate or evaporate.") Nearly all the major oil companies have been restructuring steadily since the oil bust of the early 1980s.

. . .and habit-forming

Restructuring is not only contagious but habit-forming; a company's initial restructuring is often followed by a second and a third. Frequently the first restructuring does not boost profit margins as much as management–and many analysts–expected. The reason is that in a business environment characterized by excess capacity, intense competition and widespread cost cutting- i.e., precisely the environment we are in today—lower costs tend to be passed on to customers in the form of lower prices, instead of falling to the bottom line. This reality is reflected in the profitability of the S&P 400: whether one cares to look at return on assets, return on equity or return on sales, it was no higher in 1991 than 1982, which was also a recession year (see Charts 2-4). So destructuring is not a fool-proof way to improve profitability: it may also be a prerequisite for staying in business.

Chart 2

S&P 400 operating ROA

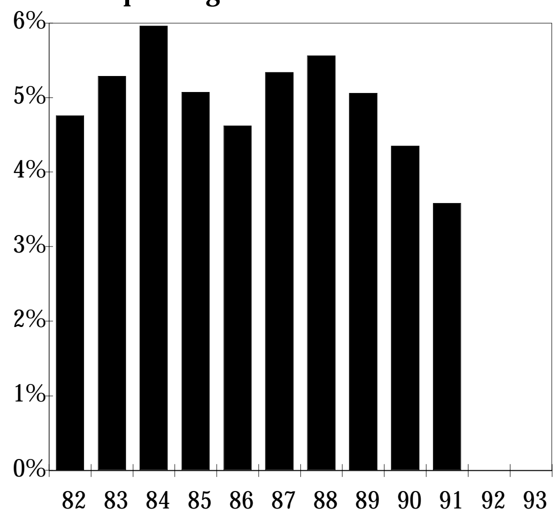


Chart 3
S&P 400 normalized ROE

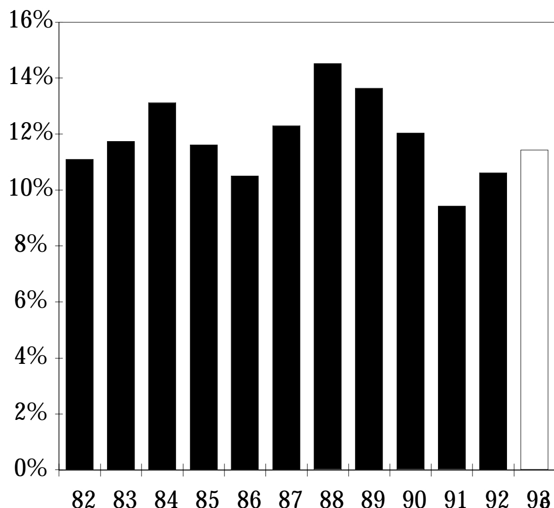
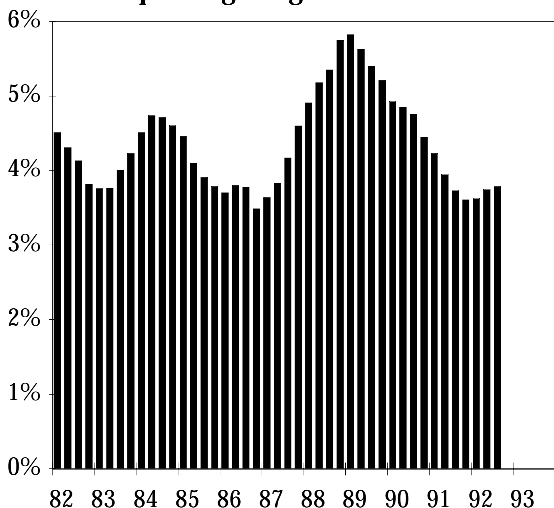


Chart 4
S&P 400 operating margin



Wall Street has been slow to catch on to this unpleasant reality. Remember back in 1989, when analysts asserted that the earnings of cyclical stocks would be surprisingly strong during an economic downturn because "their break-even levels have been lowered?" In fact the operating earnings of cyclical stocks fell *much more* in the 1991 recession than the 1982 recession. Overall, the aggregate earnings of 32 major industrial firms fell 36.8% from 1979 to 1982 and 64.5% from 1988 to 1991. A key reason is that the extremely strong profits of 1988 encouraged firms to vastly expand capacity, which in turn killed profitability when this capacity came on line during a recession. Nor have lower break-even levels led to a remarkably strong recovery in earnings in 1992 when they will rise 13%, about as much as in 1983. As observers have recognized that S&P firms are leaner and meaner but not necessarily more profitable, estimates of 1993 S&P 500 operating EPS have been pared back from the $29.00-$31.00 area to $26.00 or so.

Restructuring is no panacea for stock pickers. . .

These remarks carry an important implication for stock pickers: a restructuring may not raise a firm's stock price the way management hopes. In highly competitive industries where pricing power is poor, a firm often has to slash costs *just to stay even with its peers.* Moreover certain companies with weak managements are infamous for repeatedly announcing restructurings that fail to truly streamline the company and boost profitability. Despite four different restructurings and billions of dollars in write-offs during the 1980s, Eastman Kodak–which possesses a global consumer franchise that any CEO would drool over–has underperformed the S&P 500 by more than 20,000 basis points since 1982. Similarly, IBM's repeated announcements about cutting costs and reorganizing businesses have been accompanied by a relentless deterioration in earnings and stock price. This is a common pattern, because write-offs are actually a sign of trouble for a corporation. Firms in the S&P 500 that took more than one major write-off during the 1980s tended to substantially underperform the index both before and after the first write-off, in terms of both stock price and dividend growth.

. . .but some restructuring stories are huge winners

Although restructuring is no panacea for corporate performance, a well conceived, vigorously executed corporate revamping can dramatically boost a stock price. This is most likely to occur if the restructuring is multi faceted and wide-ranging and truly redefines the business. Typically it includes these elements:

- New top management that has a mandate to change the corporate culture and place more emphasis on rewarding shareholders.
- A serious program to cut costs and revamp operations. A good example is G.M.'s plan to shake up its supplier system and help autoparts companies become more efficient.
- A plan to exit peripheral and relatively unprofitable businesses and concentrate on the company's main markets.
- Making financial moves that boost the share price, such as repurchasing stock or raising the dividend.

When a mediocre company with a low P/E takes these steps and convinces investors that it is making a decisive

turn for the better, the impact on the stock can be dramatic. Over the past couple of years, many of the most successful stock recommendations of PaineWebber analysts have been such stocks, including Allied-Signal, Fisher-Price, General Dynamics, Goodyear, Honeywell and Varian.

Many current PaineWebber recommendations are predicated on restructuring. We are recommending General Motors on the bet that G.M.'s new management will finally be successful in stripping away several decades' accretion of bureaucracy and complacency. We are making a similar bet for the new Union Carbide. Our long-standing recommendation of AT&T is predicated on the conviction that Bob Allen, through cost cutting and shrewd acquisitions, is carrying out an "evolutionary restructuring" that will transform the company from a utility into a dynamic high-tech firm. Restructuring also plays a prominent role in PaineWebber's recommendations of British Petroleum, Weyerhaeuser, Time Warner and Textron.

Destructuring: How less is more in the late 1990s

Given the central importance of restructuring in both the 1980s and 1990s, PaineWebber's strategy group, in conjunction with the industry analysts, has published several reports on restructuring over the years including *Back to the Future: America's Second Great Restructuring* (February 1986); *Lean and Mean in the 1990s* (April, 1987) and–in those golden days of yore when picking takeover targets was less difficult than picking apples off a fruit stand--several smaller reports on takeover candidates.

With restructuring continuing at a rapid pace in the 1990s, even though raiders have passed from the scene, it seemed appropriate to revisit the theme. We challenged our analysts to be creative and even speculative: Take a look at your industry and spot companies that are *not* restructuring right now but that are either *likely to do so* over the next few years or, at the very least, *ought to do so.* Tell us exactly what the restructuring should look like and what the pay-off for shareholders might be.

Fourteen different answers to that question, covering eighteen individual stocks, constitute the sections of this report, which are briefly summarized on pages 6 and 7. They vary from the highly plausible to the rather fantastic, but–given the powerful pressures for restructuring enumerated above–we would be very surprised if at least several of them did not come to pass over the next few years. (In fact, one idea worked out before this report reached the printer–Ball Corp.'s acquisition of Heekin Can.)

Though this is strictly "bottom-up" investment research, derived from the knowledge and insights of the individual analysts, a common theme emerges: Less is more in the 1990s. By destructuring–or splitting the firm into smaller, more focused, more manageable business units–corporations can improve investment returns to shareholders. Kim Ritrievi offers a detailed analysis of how Kodak could boost its stock price dramatically by peeling away extraneous business units and becoming a global film company once again. Dave Lothson makes the case for splitting Johnson & Johnson into three businesses--a drug company (which would be North America's fifth largest), a hospital supply company and a consumer products company. Ron Nordmann shows how Bristol-Myers could raise $5 billion after tax by selling extraneous businesses, and then purchase another drug company. Andy Cash shows how ICI's market value might be boosted by more than 250% by cutting costs and splitting the company into smaller units. More limited, but still significant, destructuring is recommended for Tandy, Paramount Communications, Household International, RJR Nabisco, Ball Corp. and Watkins-Johnson, among others.

How firms may destructure

H.F. Ahmanson and **Great Western** are logical candidates for acquisition by super-regional banks that want a large retail presence in California. Why sell out? Because both companies are expert at originating ARMs, which are not popular in a low-interest rate environment, and because they face heightened competition from mortgage banks. *Page 40*

Ball Corporation could sell its aerospace division for $140 million and use the funds to pay down debt or repurchase shares. Of these options, the better is a share repurchase, which would boost the stock price by about 10%. Ball has no obvious opportunities for acquisitions. It should stick with cans, while avoiding glass containers, but the most plausible target in the can business—Van Dorn—has just been acquired by Crown Cork & Seal. *Page 31*

The energy bill that became law in November introduces competition to the electric utility industry by allowing industrial companies, municipalities, etc., to enter the grid. This is bearish for utilities with high costs and high customer rates and may force some high-cost producers to merge. **Bangor Hydro** may be acquired by Central Maine Power, and **Philadelphia Electric** might merge with Pennsylvania Power and Light. *Page 41*

Bristol-Myers Squibb is likely to sell two major divisions: 1) Toiletries, beauty aids and household products and 2) non-prescription health. They have aggregate sales of $3.8 billion (32% of total BMY revenues) and could be sold for about $5 billion after tax. BMY would use these proceeds to buy a smaller drug company such as Marion Merrell Dow, Syntex or Upjohn. Possible catalyst: Chairman and CEO is likely to retire in 1993. *Page 17*

Champion International, which has been regarded by many as an underperforming firm in the paper industry, could raise its value by carrying out a carefully conceived multipronged program such as Weyerhaeuser has done. The key steps would be to sell its unbleached kraft business, get rid of the 9.25% convertible preferred and tighten up the headcount. *Page 38*

Even though it 1) has a powerful global consumer franchise in the film business and 2) has restructured four times since 1982, **Eastman Kodak** has turned in abysmal stock market performance, underperforming the S&P 500 by about 20,000 basis points since 1982. EK should divest Eastman Chemical Company, Lehn and Fink Household Products Company, the Copy Products Division and Sterling Drug. What would be left would be a focused film company with earnings growth of 8-12%. These measures would raise shareholder value by 35% to as much as 112%. *Page 13*

Household International could raise its earnings by selling its consumer lending businesses in the U.K. and Australia, which are small and difficult to manage from Chicago. It should also sell its individual life insurance company. *Page 40*

Imperial Chemical Industries could dramatically increase its value to shareholders by taking three steps. The already announced plan to spin off its Zeneca division (drugs, ag. chemicals and specialty chemicals) could boost value from the current stock price of $60 to $78. Many investors are doubtful the spin-off will go through; we think it will. Second, breaking up the remaining ICI into four or five pieces would add another $33 per share in value, raising it to $111. The final step, which could add an additional $115 per share in value to $226 per share, involves headcount reductions that boost the revenue per employee of all the businesses to that of Dow Chemical. *Page 27*

Johnson & Johnson's market value would be at least 10% higher if it were split into three separate companies: A drug company (which would be eighth largest in the world), a hospital supply company (whose sizzle would be the Ethicon medical device business) and the consumer products business (a rather slow-growing cash cow). *Page 21*

Mark IV Industries, which has been among the best performers on the NYSE since 1982, is an astutely managed conglomerate in four separate businesses. The breakup value of IV is $23 per share, about 50% above the current market value–a fact of more than academic interest, given IV's long history of rewarding shareholders. *Page 44*

Reversing the merger excesses of the go-go '80s, **Paramount** and other large media companies will be de-conglomerating in the 1990s in order to monetize under-valued assets and form strategic alliances. Typically, these joint ventures will involve creation of a new company; each party, in return for assets contributed, will receive preferred equity with an attractive dividend as well as common equity. Paramount has diverse, relatively self-contained businesses that lend themselves to such deals. The break-up value of the company is $76 per share, about 73% above the stock price. *Page 25*

Even though it has already restructured extensively, **RJR Nabisco** is likely to restructure further. A logical step would be to divest Planters, Lifesavers and perhaps pet foods and pay down $1 billion in debt. The resulting reduction in the debt-to-total capitalization ratio to 50% would lower perceived financial risk and boost RN's P/E multiple. *Page 30*

Tandy is shifting from a technology and manufacturing based strategy toward emphasizing retailing. However to do this properly, failures of past strategies will need to be cleaned out. Specifically, TAN should divest Memtek Products and O'Sullivan Industries, limit its exposure to Europe and selectively close down McDuff stores. The possibility of these moves makes TAN stock a more interesting investment than it has been at any time in the past decade. *Page 33*

Union Pacific, now trading at $59, would be worth $70 per share if split into its constituent pieces–the railroad, resource company, Overnite and environmental business. However, there is no apparent catalyst. As for **Santa Fe Corp,**. the company has mostly completed its restructuring, but one piece is left–its minerals segment. Santa Fe is very likely to at least begin the process of spinning off this business in 1993. *Page 34*

Watkins-Johnson, a defense electronics firm with $270 million in sales, could boost its stock price from $13 to $20 by doing what General Dynamics did: Stop spending money to expand in a contracting economic sector and reward shareholders instead. WJ has $45 million, or $6 per share, in cash and it spends $38 million per year on R&D and capital spending. By sharply reducing these expenditures, WJ would theoretically be able to repurchase the entire company in two years. *Page 23*

The Perils of Productivity
Will destructuring produce a job drought?

Destructuring is highly bullish for the U.S. economy in general and stock and bond investors in particular. Companies are learning how to produce more goods and services with fewer workers. They are finally getting the productivity payoff from the enormous investment in technology over the past decade–particularly the investment in personal computers, workstations, etc. that have become cheaper and more powerful. As microprocessors become ever more user-friendly and ubiquitous and wireless communications proliferate, this automation of the service sector will continue throughout the 1990s.

For investors, the most immediate payoff from destructuring will be low inflation and declining long-term interest rates. In our 1991 report *6 in '96* we cited service sector restructuring and productivity improvements as key factors driving inflation lower during the 1990s, and that process is clearly under way. Because destructuring shows every sign of continuing even during an economic upturn, there is good reason to believe that bond investors will be pleasantly surprised by the low level of inflation during the economic recovery. Rising productivity also sets the economic basis for rising real wages in the late 1990s, after a quarter century of stagnation. Unfortunately, these long-term benefits are obscured by the pain and agony that accompany destructuring. Naturally what grabs the headlines is not the prospective lower inflation in 1996, but thousands of layoffs today. We are witnessing the "creative destruction" that the German economist Joseph Schumpeter characterized as the essence of capitalism–a more productive, computerized economy is being built on the ruins of a less efficient economy.

A dimly recognized risk

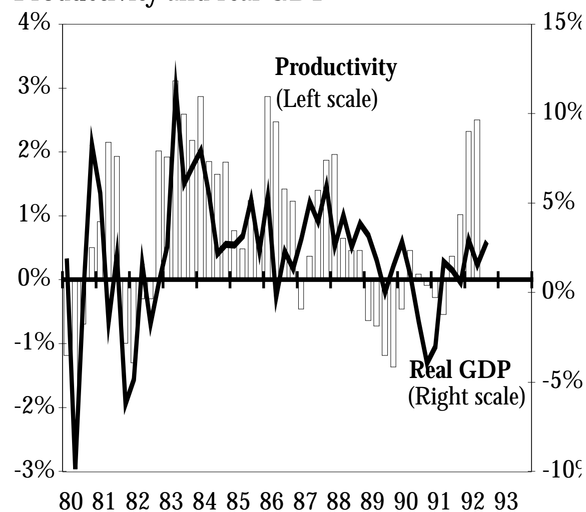
Notwithstanding the fundamentally bullish implications of corporate destructuring, the process poses a novel set of challenges for the U.S. economy and for the new Administration that is taking shape in Washington. What makes these problems risky is that they are rather dimly recognized by policy makers in Washington. It is, of course, not uncommon for expert opinion to overlook dangerous economic problems–it is their very invisibility that makes them dangerous. In the early 1980s Washington was focused on the budget deficit and was blindsided by the strong dollar and exploding trade deficit, the proximate cause of the 1987 stock market crash. In the late 1980s Washington paid inadequate attention to the S&L crisis, bank credit crunch and real estate collapse barreling down the track.

The problem that official Washington may be grossly underestimating now–and is underestimating precisely because it was not a problem during the 1980s–is a job drought caused by two powerful and complementary forces. On the one hand, corporate destructuring by large firms is destroying thousands of well paid jobs with good benefits, the kind of job you used to be able to raise a family on–middle manager, computer salesmen, aerospace engineer, etc. Meanwhile, small entrepreneurial firms–the engine of job creation during the 1980s–may fail to create many new jobs because they are stymied by the credit crunch, higher taxes and a spate of onerous new government regulation on top of old ones.

These two forces could produce a job drought–several years of fairly respectable GDP growth, anemic employment growth and (because output grows faster than employment) very strong productivity growth. What makes this pattern plausible is that it is pretty much what we got in 1992: Productivity growth was just as fast as in 1983, even though GDP growth and employment growth were much weaker (Chart 5).

Chart 5

Productivity and real GDP



Employment trends in the S&P 500

To appreciate how corporate destructuring is cramping employment growth, let's look at trends in the large firms that comprise the S&P 500. The latest available comprehensive figures are for year-end 1991, so these data are not completely up-to-date. Between 1986 and 1991, total employment in the S&P 500–both domestic and overseas–rose just 3.6%, and it has been flat since 1988 (Table 2). Because many firms were expanding overseas in the late 1980s in both Europe and Asia, it is very probable that employment by S&P firms within the U.S. actually declined during this period.

Table 2

Total employment of S&P 500, 1986-91

Year	Employment
1986	18,585,000
1987	18,680,000
1988	19,010,000
1989	19,400,000
1990	19,565,000
1991	19,255,000

Table 3

25 Biggest job losers in S&P 500, 1986-91

Company	Jobs
General Motors	120,500
General Electric	75,000
Mobil	59,900
IBM	58,950
Allied-Signal	38,900
Unisys	38,000
Sante Fe	37,750
May Dept. Stores	36,700
Sears	35,400
Rockwell Int'l	34,190
Union Carbide	33,590
TJX	33,500
American Brands	31,300
Hershey	31,980
General Dynamics	30,100
Nat'l Med. Ent.	27,890
Occidental	26,300
Lockheed	24,600
Whitman Corp	23,460
Beverly Ent.	23,000
Goodyear	22,360
Ceridian–Control Data	21,410
Textron	20,000
Honeywell	19,910
Teledyne	15,400

The 25 biggest job losers are shown in Table 3. Not surprisingly, several firms in the throes of destructuring–including Allied Signal, GM, General Dynamics and IBM –make the list. The 25 biggest job creators are shown in Table 4. Wal-Mart and PepsiCo are the job-creation champs, and no less than eight of the 25 are in the retailing or restaurant business. Unfortunately, these are not very remunerative jobs; wholesale and retail jobs have hourly earnings equal to just 62% of manufacturing wages. In the S&P 500 the major airlines also added plenty of jobs through acquisition, as the industry consolidated in the hands of large carriers such as AMR, Delta and USAir.

Table 4

25 biggest job creators,in S&P 500, 1986-91

Company	Jobs
Wal-Mart	230,000
PepsiCo	124,000
AMR	61,960
Philip Morris	55,000
Federal Express	47,400
General Mills	45,880
Nations Bank	45,070
Dayton Hudson	42,000
Limited	40,600
ConAgra	38,610
Waste Mgmt	38,590
H.R. Block	34,540
USAir	33,200
American Express	31,980
Boeing	30,700
Alcoa	29,900
Melville	29,750
Winn-Dixie	29,100
K mart	29,000
Delta	27,610
Int'l. Paper	26,500
Sara Lee	26,500
Halliburton	26,490
Digital Equipment	26,300
Walt Disney	26,000

Table 5

25 Biggest employers in S&P 500, 1991

Company	Employees
General Motors	756,300
Sears	450,000
Wal-Mart	371,000
K mart	349,000
IBM	344,550
PepsiCo	338,000
Ford	332,700
AT&T	317,100
General Electric	284,000
Marriot	202,000
United Technologies	185,100
J.C. Penney	185,000
Kroger	170,000
Dayton Hudson	168,000
McDonald's	168,000
Philip Morris	166,000
GTE	162,000
Boeing	155,700
American Stores	148,000
Woolworth	144,000
Kodak	133,200

DuPont	132,580
Chrysler	124,000
Digital Equipment	121,000
AMR	116,260

So much for history. What about the future? It seems very doubtful that employment by S&P firms within the U.S. will pick up much over the next few years. Table 5 shows the 25 biggest employers in the S&P 500 in 1991, which accounted for about a third of total employment by the entire S&P 500. Of these 25, at least 10 will be in a destructuring mode over the next couple of years, and that includes the top two employers (GM and Sears) as well as the fifth biggest (IBM). It seems to us that only a few of these big employers, notably Wal-Mart and PepsiCo, will be adding many domestic jobs. Indeed, of the top 50 employers in the S&P 500 in 1990, only 10 increased employment in 1991; of the second 50 employers, only 20 did. And some of the "job creators" either did it via acquisition or created the jobs overseas. More generally, major employers in the following industries are likely to be shedding thousands of jobs as they destructure over the next few years:

Autos: GM will finally get lean and mean, forcing dozens of suppliers to do likewise.

Computers: IBM and DEC must shrink their sales forces to survive in the age of mail order computers. Of course, many new jobs are being created at successful rivals such as Dell and Novell.

Bell Operating Companies: They are saddled with traditional technology and facing tough competition from wireless communication and the cable companies.

Airlines: The fare wars never seem to end, and recessions in Japan and Europe don't help.

Commercial aviation: It is tough to prosper when most of your customers are losing lots of money.

Aerospace and Defense: Real spending will shrink 6% annually through 1996.

Pharmaceuticals: Sales forces will shrink as drug inflation slows and more drugs are sold to big buyers such as HMOs. R&D expenses will also be reined in.

Oil and Gas: The industry has been hit hard by the Clean Air Act and other manifestations of enviromania.

Insurance: A victim of weak underwriting trends and real estate deflation, which this industry has been much slower to recognize than the banks.

To be sure, these trends are hardly "new news" to stock market investors, whose job is to peer into the future. But it does not follow that these trends are yet fully reflected in the payroll employment numbers that mesmerize investors, politicians and central bankers every month. There can be a long lag between the time when a huge company encounters financial hardship and announces a restructuring, and the time when the bulk of layoffs actually occurs. Consider, if you will, Digital Equipment, whose stock has been very weak over the past few years, declining 84% from a 1987 peak of $200 to a recent price of $33. Employment at the end of 1991 was 121,000, down only slightly from the peak of 126,000 at the end of 1989, and way *up* from the 1986 level of 95,000. We can expect the company's recent announcement of 8000 layoffs to be one of many over the next couple of years. Another example is Westinghouse. With its credit rating and stock price collapsing and the bankers refusing to lend it more money, the company recently announced a massive restructuring that will cut revenue by 34%. But employment at the end of 1991 was only 7% below its 1989 peak.

Table 6

Selected firms that are downsizing or may do so

Employment change, 1986-91

	Change in employment	Percent change
Allied- Signal	-38,900	-28.35
American Express	+31,980	+40.61
Caterpillar	-100	-0.18
Citicorp	-2,500	- 2.82
DuPont	-8,690	- 6.15
Digital Equipment	+26,300	+27.77
General Motors	-120,500	-13.74
Goodyear Tire	-22,360	-18.67
IBM	-58,950	-14.61
ITT	-13,000	-10.57
Kroger	-3,900	-2.24
McDonnell Douglas	+3,430	+3.24
Sears	-35,400	-7.29
Tenneco	-12,000	-11.88
United Technologies	-8,400	-4.34
Westinghouse	-3,600	-3.07

These are not unique examples. The firms in Table 6 are "usual suspects" for corporate downsizing in 1993 and beyond–firms with financial and operational problems that should compel management to cut payrolls within the U.S. over the next few years. In addition to DEC and Westinghouse, Citicorp, DuPont, McDonnell Douglas, Sears and United Technologies have had relatively flat payrolls in recent years. Although IBM has reduced headcount significantly, Big Blue's business shows few signs of stabilizing; many more employees will have to be laid off.

Of course, it is not just companies in trouble that are cutting payrolls. Relatively successful companies that are determined to stay out of trouble in a deflationary environment are trimming payrolls as well. So downsizing and destructuring is a pervasive phenomenon. Perusing the newspaper over the past few weeks, we find layoff and downsizing announcements by Bell South, Monsanto, Reynolds Metals, United Technologies and Boeing, as well as AMR, NWA, Bristol-Myers, Westinghouse, Salomon and Digital Equipment.

Regulation is squeezing small business employment

Although it is certainly traumatic for the affected employees, corporate downsizing is not too disruptive to near-term economic growth so long as the laid off workers are able to find good new jobs. This brings us to the second possible cause of the job drought, which we will only sketch briefly: The spate of regulation and tax hikes that may hinder small business. It started during the Administration of George Bush, definitely not kindler and gentler to business, which included these features:

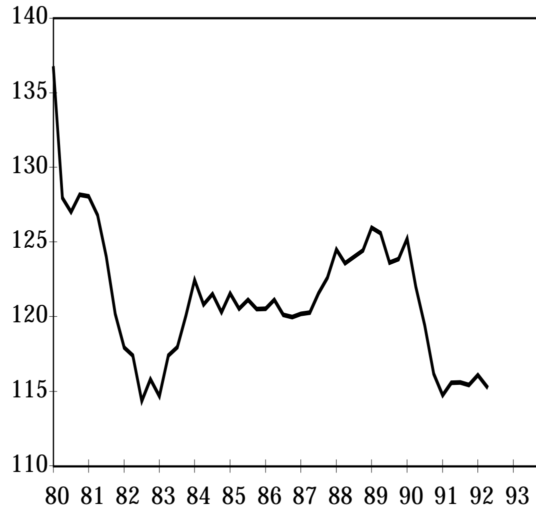
1. Clean Air Act--costs businesses $25-$35 billion per year, an amount equal to more than 10% of corporate profits. This hits the local dry cleaner or printer just as hard as it hits Exxon or DuPont.
2. Higher minimum wage.
3. Americans with Disabilities Act requires ramps and elevators in many facilities, and invites litigation.
4. Tougher environmental regulation by many states, notably California, one-seventh of the U.S. economy.
5. The Civil Rights Act, which invites litigation and makes it harder to fire people.
6. Workmen's compensation costs are skyrocketing in certain states, such as California.

All this represented a dramatic change from the *easing* of regulations under Ronald Reagan. Meanwhile, small business was also hit by a recession, a credit crunch and tax increases in 1991–enough to give the most intrepid entrepreneur indigestion. Not surprisingly, business formation has remained at recessionary levels far longer than in 1983 (Chart 6). And now here comes a new President who promises to continue George Bush's policy of re-regulation and tax hikes with such measures as:

1. Provision of universal health insurance, which might entail a 6-7% payroll tax on businesses that do not provide health insurance. This would be bad news for small business; more than 20% of firms with less than 100 employees do not offer health insurance.
2. A payroll tax of 1.5% to finance worker training.
3. An unpaid family leave bill, which would boost overtime costs for business, especially firms that have a small, less flexible group of employees.
4. More aggressive environmental regulation. Even if major new initiatives are not passed for a couple of years, environmentalists in the EPA will have a free hand to interpret and enforce regulations aggressively, without interference from Dan Quayle's Competitiveness Council.
5. Tort reform, designed to reduce litigation expense for business, is likely to receive less attention from the new Administration.

Chart 6

Business formation index



The last time we had a wave of regulation, in the 1970s, businesses responded by raising prices, which made inflation worse. Most firms do not have that luxury in today's deflationary environment, so they are likely to hold back on expansion, particularly payroll expansion. Other factors will keep small business people on the defensive, including higher personal income tax and the still lingering credit crunch. Furthermore, the same technological advances–cheaper and more powerful PCs; better software; huge advances in telecommunications–that are enabling large firms to substitute capital for labor create similar opportunities for small businesses to automate.

The companies most at risk from new regulation would not be small-cap companies as the term is used on Wall Street. Rather the main victim would be very small neighborhood firms–gas stations, single-store retailers,

restaurants, beauty parlors, small trucking firms, machine shops, construction companies, etc.—that employ 5-100 people. Small-cap stocks, such as the firms in PaineWebber's Supergrowth Index, typically employ more than 1000 workers; many employ 2,000 to 5,000. As of year-end 1991, Clothestime employed 3,200; Neutrogena 1,345; Staples 5,000; Quality Food Centers 2,000; and 1,471. In many cases, these fast-growing firms are in the process of putting "mom and pop" companies out of business. So it is possible that a tougher regulatory environment would be *bullish* for supergrowth stocks as it forces "mom and pops" to go out of business.

Chart 7A
Average hourly earnings, deflated by CPI

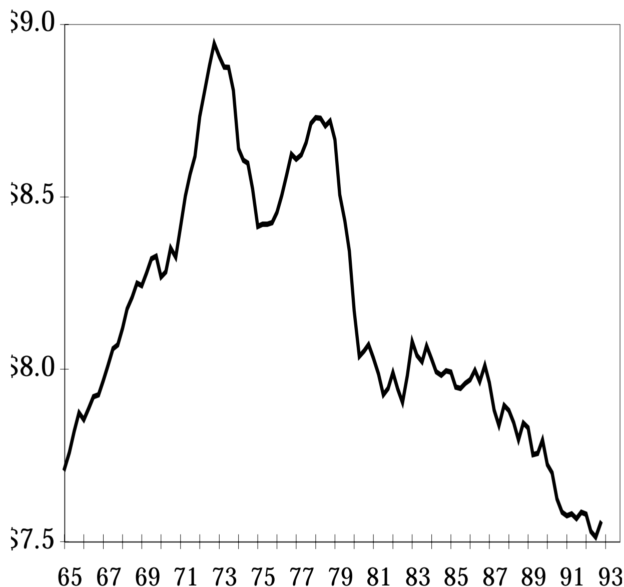
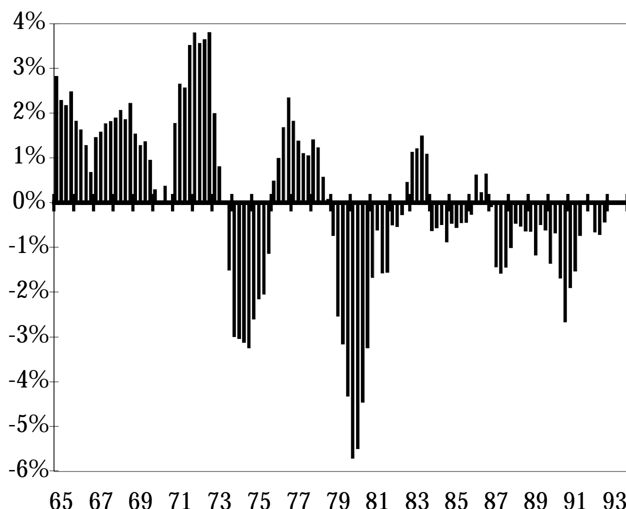


Chart 7B
Year-to-year change



Economic implications of the job drought

Thanks to this double-whammy of destructuring by large firms plus cautious hiring by small firms battered by regulation during the Bush years, we would not be surprised to see a magazine cover, sometime in the summer 1993, bearing the headline "*Can Clinton End the Job Drought?*" The job drought would not dramatically boost the politically important unemployment number because the growth of the labor force has slowed down dramatically since the 1980s. Nevertheless, it would retard economic growth, ensuring that this continues to be a subnormal recovery. Right now, real wages are declining at a rate of 0.5-1.0%, depending on the measure one uses (Chart 7). So real disposable income growth is driven almost entirely by job growth. Meanwhile, rising taxes at the Federal and state level will retard income growth. And because the savings rate is rising, a declining proportion of this slow-growing income will be spent by consumers. Moreover, with Germany and Japan in recession, foreign demand cannot be depended upon to improve economic momentum. So the Clinton economy could be slowed by a job drought for the next two to three years. Weak job growth will also make it tougher to achieve America's #1 social priority–absorbing America's "underclass" into the socio-economic mainstream.

However, if the new President successfully negotiates the political and economic risks posed by the job drought, during his second term Mr. Clinton will enjoy a superb economy featuring low inflation, low interest rates, rising productivity and rising real wages.

Creating Kodak—The Film Company

Kimberly Ritrievi

You could call it the endless restructuring. Kodak management restructured the company four times between 1982 and 1992, incurring large charges to earnings and, in our view, major long term morale problems in their workforce. Only a few other firms in the S&P 500 have taken more major write-offs over the past decade. While management was firing employees, it was also buying (and then selling, in some cases) new companies outside the film business, including Sterling Drug, Verbatim and Atex.

Unfortunately, this fire-and-acquire strategy has been unsuccessful. Operating profits did not rise for more than two years following the restructurings, which were primarily headcount reductions. The absence of sustainable profit growth indicates that these restructurings were not the appropriate cure for what ails Kodak. A company is its people, and management's diversification plan over the past decade has not infused Kodak employees with any common expertise or mission.

What to do? We think Kodak needs a radical restructuring to take its energies back to the film business. With only one basic manufacturing and selling activity–film and products related directly to film–Kodak could again become a tough and responsive competitor in the business upon which the company was founded. This back-to-basics approach could create a solid company with a growth rate of 8-12% and raise the price of the stock by 33% to 122%.

The catalyst for such a restructuring could be a dissatisfied board of directors, a group of strong institutional shareholders, the company's lenders–or all three. Certainly shareholders have every reason to be unhappy. Despite the numerous restructurings and possession of a potentially valuable global franchise in film, Kodak's stock price performance has been abysmal. The stock is slightly below its 1982 high, while the S&P 500 is about 194% above its 1982 high, so EK has underperformed by more than 20,000 basis points. Kodak's lenders could also put pressure on the company because it has not yet produced a year of positive operating cash flow after dividends and capital spending since the Sterling Drug acquisition in 1988. Kodak has about $10 billion of debt on its balance sheet, which could be reduced considerably in the restructuring we propose.

There are four restructuring actions we would take up front:

- Sell or spin off Eastman Chemical Company.
- Sell or spin off Lehn and Fink Household Products Company.
- Sell Copy Products Division.
- Sell Sterling Drug Company.

These moves, whose impact is summarized in Table 10, would reduce Kodak's revenues by $9 billion or 45%. What remains is a very different entity that we would call Kodak–The Film Company, a well focused growth stock with $11 billion in revenues and a powerful global brand name producing goods for the following customers:

1. Amateur photographers.
2. Professional photographers.
3. Movie makers.
4. Graphic artists.
5. Archivists (microfilm type products).
6. Radiologists.

Table 7 shows 1993 sales, operating profits, capital spending and depreciation forecasts for each business.

The workforce of Kodak–The Film Company would be concerned primarily with serving customers who capture and display images. Product development should be faster because expertise is concentrated on one activity. This is important because the industry's unit growth is likely to be slow, just 3-5% in the imaging business, down from the 7-9% in the 1970s. Therefore, product development would be critical to accelerating unit growth. Although unit growth likely would be slow, we think Kodak–The Film Company would be a substantial cash generator and able to continuously improve its cost structure, allowing pretax profits to grow faster than the top line. Kodak would be a far less complex company following the financial restructuring that we are proposing. It is impossible to estimate the savings in overhead costs that could be achieved if Kodak were as simplified as we are projecting, but it would be very considerable.

Table 7
Kodak—The Film Company
Dollars in millions

	1993E
Sales	
Consumer/Amateur	$5,500
Professional	1,000
Motion picture/Audio visual	1,000
Graphic arts	950
Business imaging	950
X-ray and clinical films	1,700
Total	$11,100
Operating profits	
Consumer/Amateur	
Professional	$1,330
Motion picture/audio visual	
Graphic arts	35
Business Imaging	35
X-ray and clinical films	355
Total	$1,755
Capital Spending	
Consumer/Amateur	
Professional	$550
Motion picture/audio visual	
Graphic arts	50
Business imaging	
X-ray and clinical films	50
Total	$650
Depreciation	
Consumer/Amateur	
Professional	$550
Motion picture/audio visual	
Graphic arts	75
Business imaging	
X-ray and clinical films	75
Total	$700

Financial restructuring

Here is how the above-mentioned divestitures could be carried out, and what we think they would fetch in the marketplace.

Sell or spin off Eastman Chemical Company

We think the closest comparable to ECC is Rohm & Haas. Operating return on sales and assets for ECC is comparable or a bit better; each company makes mostly commodity chemicals, but those manufactured only by a small number of competitors; and each company is partially backward integrated into the commodity raw materials for its main products. Our forecasts for sales and operating profits for 1993 for ECC appear in Table 8 along with those for ROH (provided by Andrew Cash, our chemical analyst). At the same 8 times 1993 interest coverage ratio as ROH, ECC could support $58 million of interest expense and about $700 million of debt. At the same market capitalization/earnings as ROH, ECC's market capitalization would be $3.82 billion or $11.75 per current EK share. At the same yield as ROH, ECC should pay a $0.30 dividend. If ECC were sold it would probably get a 10-20% premium to our market capitalization estimate. We estimate that it would be worth $4.2-4.6 billion or $3.1-3.4 billion after tax.

Table 8
Eastman Chemical Company (ECC) proposed spin-off value
Pro forma estimates 1993, dollars in millions except per share data

	ECC	ROH
Sales	$3,855	$3,495
Operating profit	475	450
Interest expense	(58)	(55)
Pretax income	417	395
Net income	267	257
Interest coverage	8.2x	8.2x
Market capitalization*	$3,822	$3,679
Dividend per share	$0.30	$1.36
Yield	2.50%	2.50%
Debt	$640	$675
Assets	$4,000	$3,200
Book value	$1,050	$1,655

*$11.75 per EK share

Sell or spin off Lehn and Fink Household Products Company

Our estimate of Lehn and Fink (LNF) sales and operating profit is $1.2 billion and $150 million (including significant goodwill amortization of about $40 million annually). This estimate is based on the last published data in the 1986 Sterling Drug annual report for the household products segment of its business and the historical 7% and 8% sales and operating profit growth rates for the domestic business. We added the 1986 results of the international household products business to the grown domestic revenue and profit base. Therefore, we think this is a conservative estimate. Household products businesses can be sold for 9-12 times operating profit. Therefore, LNF could be sold for $1.35-1.8 billion or $0.9-1.2 billion after tax. Alternatively, LNF could be spun off to shareholders. Pro forma sales and earnings forecasts for LNF appear in Table 9 along with those for Clorox (Clorox forecasts courtesy Andrew Shore),which we are using as a stock market comparable. Based on a 16 times 1993 interest coverage ratio similar to that projected for Clorox, LNF could support $10 million of interest expense or about $115 million in debt. If LNF sold at the same market capitalization/earnings as Clorox, its market value would be $1.4 billion or $4.40 per Kodak share.

Based on this share price and Clorox's yield, LNF should pay a $0.15 dividend.

Table 9

Lehn and Fink Company (LNF) proposed spinoff-value

Pro forma estimates 1993, dollars in millions except per share

	LNF	Clorox (FY June 93E)
Sales	$1,200	$1,815
Operating profit	152	285
Interest expense	(10)	(18)
Pretax income	142	272
Net income	94	163
Interest coverage	16x	16x
Market capitalization*	$1,434	$2,486
Dividend per share	$0.15	$1.58
Yield	3.46%	3.46%
Debt	$115	$339
Assets	$2,600	$1,600

*4.40 per EK share

Sell the Copy Products business.

Copy Products' sales will be an estimated $1.9 billion in 1993 and the operating profits could be $100 million following the restructuring cost savings that the company expects to realize. We are estimating very small proceeds from the sale of this business because we are not sure what its current real problems are or what future potential could be. Therefore, 4-5 times our 1993 operating profit forecast is the highest reasonable forecast we can make, or about $400-500 million. Depending upon the actual fixes that need to take place at Copy Products, the knowledge and expertise of the buyer and the future market uncertainties, our forecast could be too low, but it probably won't be too high unless Kodak is heading for disaster in this business.

Sell Sterling Drug

Sterling Drug has been intertwined with the Sanofi pharmaceuticals business. For the purposes of this exercise, we assume that the alliance is dissolved. Kodak sells the original businesses it acquired from Sterling Drug, which are about $1.3 billion in ethical pharma-ceutical sales and another $900 million in worldwide OTC medications sales. The operating profits from this business are about $130 million including $80 million of annual goodwill amortization expenses. Ethical pharma-ceuticals businesses have sold at about 4 times sales and OTC businesses at about 3 times sales. However, Sterling Drug does not have a strong pipeline of products, and its operating profits are subnormal because of the substantial goodwill amortization charges. Our operating profit forecasts including goodwill are about 60% of those excluding goodwill amortization. Therefore, we cut the "normal" multiples of sales by 40% to determine proceeds from the sales of Sterling Drug. Again, we think this is a conservative forecast. The Sterling ethical drug business could be sold for 2.5 times sales or $3.25 billion and the OTC business for 1.9 times sales or $1.7 billion. After tax proceeds from these sales would be about $3.3 billion.

Table 10

Eastman Kodak: Overview of the destructuring

	Spin offs/Sales	All Sales
ECC	***Spin off***	***Sell***
	$11.75/share	$3.1-3.4 billion ATX
	$7000MM Debt	
	$0.30 dividend	
LNF	***Spin off***	***Sell***
	$4.40/share	$890 million-
	$115MM debt	1.2 billion ATX
	$0.15 dividend	
Copy Products	***Sell***	***Sell***
	$400-500 million ATX	$400-500 million ATX
Sterling Drug	***Sell***	***Sell***
	$3.3 billion ATX	$3.3 billion ATX
Debt reduction & sales proceeds	$4.5 billion	$7.7-8.4 billion
Market value ofstocks	$16.15/share	

The Film Company that is left

Table 11 is a pro forma earnings forecast for Kodak–The Film Company under two scenarios. The first column assumes that ECC and LNF are spun off as separate stocks with assigned debt to match the interest coverage ratios of comparables and that the after tax proceeds from the sale of Copy Products and Sterling Drug are used to pay down debt. The second column assumes that all businesses are sold and that the after-tax proceeds are used to retire debt. What is most interesting about the numbers in Table 11 is that Kodak–The Film Company would earn about $3.70 per share in 1993. Our 1993 EPS forecast for the current Kodak is $4.05. Kodak could accomplish a restructuring to focus on the film business, dramatically improve its balance sheet and lose less than 10% of its earning power, while raising its earnings growth rate.

The 1993 EPS forecasts for Kodak–The Film Company are not what is really impressive about the effects of the financial restructuring. The consistent earnings growth potential of this company is what intrigues us about the ultimate stock market value of this "stub." Our growth

forecasts are summarized in Table 12. We think top line growth will be 4-7% with 3-5% coming from unit growth and just 1-2% from price increases. Given the smaller asset base and the more streamlined company structure and mission, operating profits could grow faster than sales growth by 2-3%. The new company should generate ample free cash flow as shown in Table 12. Kodak–The Film Company should be able to add 2% to its EPS growth through debt reduction from its free cash flow. Therefore, the new company would be able to increase earnings at about an 8-12% annual rate. This is a wide growth range, but since the company will be so radically different from the current company, we think this is as close as we can estimate credibly.

Table 11

Kodak destructuring under two scenarios

Dollars in millions except per share data and as noted

	Spun off 1993E	Sold 1993E
Sales	$11,100	$11,100
Operating profit	$1,755	$1,755
Interest expense	($460)	($120)
Other income	$200	$200
Pretax income	$1,495	$1,835
Net income	$987	$1,212
EPS	$3.05	$3.70
Dividend	$1.55	$2.00
Total debt	$5.3 billion	$1.9 billion
Total assets	$10.6 billion	$10.6 billion
Value of spinoffs	$16.15 per share	

How much is the new Kodak worth?

A solid target range of earnings multiples for Kodak–the Film Company could be those of good consumer products companies with low double digit growth rates. We chose some of the names that PaineWebber analysts follow and with forecasted secular growth within the range we forecast for the restructured Kodak. As shown in Table 13, these stocks sell at 14.7-15.9 times 1993 EPS prospects and yield from 2.2 % to 2.9% (excluding Helene Curtis). If our financial restructuring took the form of all asset sales, Kodak–the film company would be a $54-59 stock based on the target P/E multiple range or a $70-90 stock based on dividend yield if it sold at similar valuations to other high-quality consumer products companies. If our financial restructuring took the form of spin-offs and assets sales, ECC and LNF which would generate about $16 of market value per Kodak share, Kodak–the Film Company would be a $45-48 stock based on P/E multiples or a $54-70 stock based on dividend yield. Our price target range for the restructuring we propose is $54-90, which projects 33-122% upside potential. Even though some scenarios generate only modest immediate upside, our assumptions for restructuring have been conservative and, what's most important, we believe Kodak–The Film Company would be placed on a firm footing for consistent, above average earnings growth in the future.

Table 12

The New Kodak: Growth and cash flow forecasts

Growth components	
Units	3-5%
Price	1-2%
Sales	4-7%
Cost savings	2-3%
Cash Flow	2%
EPS	8-12%

Dollars in millions

Cash flow forecast 1993E

	Spinoffs	Sales
Net income	$987	$1,212
Depreciation	700	700
Capital spending	(650)	(650)
Dividends	(520)	(650)
Free cash flow	$517	612

Table 13

What the New Kodak would be worth

Company symbol	Projected secular growth	Recent price	EPS 1993E	Dividend	P/E	Yield
BUD	12	57 7/8	$3.95	$1.28	14.7	2.21%
HC	11	41 3/4	$2.70	$0.24	15.5	0.57%
HNZ	11	42 1/2	$2.80	$1.20	15.2	2.82%
HSY	11	45 3/8	$2.90	$1.08	15.6	2.38%
OAT	11	67 1/4	$4.25	$1.92	15.8	2.86%
KMB	11	59 5/8	$3.75	$1.64	15.9	2.75%

Kodak	*P/E Range*		*Div yield range*	
All sales	$54.21	$58.83	$70.05	$90.43
Spin-offs and sales	$44.69	$48.50	$54.29	$70.08
Spin-off values	$16.15	$16.15	$16.15	$16.15
Total value	$60.84	$64.65	$70.44	$86.23
Percent upside				
All sales	33.0%	44.4%	71.9%	121.9%
Spin-offs and sales	49.3%	58.6%	72.9%	111.6%
Price 12/14/92	40 3/4			

Bristol-Myers Squibb: High-quality restructuring candidate

Ronald Nordmann

In October 1989, Bristol-Myers Company acquired Squibb Corporation. To most students of the pharmaceutical industry, this consolidation looked like a "hand in glove" fit. Bristol-Myers was a well diversified company with an aging pharmaceutical division (except for its leading cancer drug franchise) and a strong consumer products division. Squibb was a completely restructured company that was well positioned in healthcare (85% pharmaceuticals and 15% diagnostics). The next two years were devoted to integrating the two companies. Many obvious synergies and cost savings were realized as a result of merging these two businesses, and the company turned in strong financial results. Most members of the financial community believed that Bristol-Myers Squibb could sustain 18-20% earnings growth for the next 5-10 years.

Earnings growth falters

However, these expectations were too optimistic. Because of several factors, including the building of excess domestic pharmaceutical wholesaler inventories and high SG&A expenditures related to the launch of a large number of new drugs, the company's growth stalled badly in 1992. Earnings per share will rise only 7-8% this year, and many analysts cut their secular earnings growth rates for the corporation to the low double-digit area. We are using a 15% longer-term growth rate for Bristol-Myers Squibb. However, just one year ago, we thought that the company could sustain a three to five year earnings growth rate of 20%.

The company's structure

Bristol-Myers' revenues should reach $12 billion in 1992, distributed among businesses as follows:

Pharmaceutical sales	$6.5 billion
Medical devices	$1.7
Over-the-counter drugs	$2.0
Toiletries, beauty aids, household products	$1.8

It is currently the third largest drug company in the world behind Merck and Glaxo. Its research program appears to be no worse than average with several new drugs of commercial promise in the late stages of clinical trials. Its

new anti-cancer drug, Taxol, may be the most important new drug in this therapeutic class in the entire industry.

However, the remainder of the company's revenue base is quite mature. The over-the-counter drug business and toiletries divisions are growing slowly, and six drugs accounting for estimated current year sales of $3.0 billion will experience patent expirations in the 1995-2000 period. If Bristol-Myers Squibb is to maintain strong earnings growth and become the world's leading pharmaceutical company, it must, in our opinion, undertake a major restructuring program.

This organization has been slower than its peers to restructure, for a very good reason. The pooling basis of the Bristol/Squibb consolidation prohibited any major restructuring until late last year in order to preserve the tax-free aspects of the transaction. This year, the company sold its Drackett household products business to Johnson Wax for $1.15 billion. We think that this is the first step in a much more significant program to reshape this corporation. However, the company has not endorsed our theory. Described below is our plan, theoretical to be sure, as to how this restructuring might occur.

Chart 8
Bristol-Myers Squibb: Spinoffs

Possible catalyst: Likely management change in 1993

In many companies, the catalyst for restructuring is a change in senior management. Warner-Lambert, for example, restructured soon after the retirement of its chairman and CEO, Joseph Williams, in 1990. Will there be a significant change in senior management at Bristol-Myers Squibb in 1993? No announcements have been made to date, but we would not be surprised if the company's chairman and CEO, Richard L. Gelb, retired in mid-1993. Mr. Gelb is 68 years old and will complete a three-year term as a member of the corporation's board of directors in June 1993. He may, however, choose to stand for re-election to the board for an additional three-year term to be completed in June 1996. Mr. Gelb has provided outstanding leadership to this company for several decades, and he, along with the now retired chairman and CEO of Squibb Corporation, Richard Furlaud, engineered the consolidation of the current company in 1989. Mr. Gelb agreed to stay on that year beyond normal retirement age to supervise the merger of the two companies. His work would appear to be nearing completion, and we guess that he will retire in 1993.

Fresh evidence supporting the likelihood that Mr. Gelb will retire in 1993 is the recent promotion of Mr. Charles A. Heimbold, Jr. to the position of President and chief operating officer of the corporation. Mr. Heimbold fills a position vacated by Mr. Furlaud when he retired. Mr. Heimbold's background is somewhat similar to Mr. Gelb's with extensive experience in consumer products. Nevertheless, we do not think that he would block our restructuring proposal.

Table 14
Business that Bristol-Myers Squibb could divest
Dollars in millions

Business to be divested	1992 estimated sales	Valuation *(multiple of sales)*	Spin-off value *($ millions)*
Toiletries, beauty aids & household products			
Hair coloring	$535	1.25	$669
Beauty appliances	120	0.50	60
Antiperspirants	210	1.75	367
Drackett* (household products)	600	1.92	1,150
Other	355	1.00	355
Total	$1,820	1.46	$2,601
Nonprescription health products			
Infant nutritionals	$885	3.00	$2,655
Adult nutritionals	300	3.00	900
Other nutritionals	175	2.00	350
Analgesics	460	3.50	1,610
Cough/cold	95	3.00	285
Skin care	45	2.00	90
Other	15	1.50	22
Total	$1,975	2.99	$5,912
Divested value of toiletries, beauty aids & household products and nonprescription health products=			$8,513
Estimated book value of divested businesses			1,000
Tax basis			7,513
Taxes (34%)			2,554
Net proceeds			$4,959

*Sold to Johnson Wax in November 1992.

Mr. Gelb's father was the founder of Clairol, the company's leading cosmetics business. Clairol is one of the

few remaining cosmetics businesses still owned by a major pharmaceutical company. Many others–Elizabeth Arden (Eli Lilly), Maybelline (Schering-Plough), Lanvin/Charles of the Ritz (Squibb)–have been divested. We doubt that Bristol-Myers Squibb would consider selling its Clairol division while Mr. Gelb was still chairman. However, if he retires in 1993, a sale is certainly possible.

What will go and what will stay?

Beyond 1993, we think that Bristol-Myers Squibb will concentrate solely on its prescription drug business and medical device business, while selling the nonprescription health and toiletry/beauty aids divisions. Even its nutritionals business might be sold, despite its high level of profitability. As shown in Table 14, we value these two divisions at $8.5 billion (pretax).

What would the company do with $5 billion in after-tax proceeds if it followed our plan? One possibility would be to leverage the balance sheet. Right now, Bristo -Myers Squibb is not a highly leveraged company. Debt as a percent of total capital is only 8.9%, well below the drug industry average of 21.0%. Should the corporation utilize the entire $5.0 billion to repurchase shares, it could buy back about 70 million shares and reduce total common shares outstanding to about 445 million. This would have the effect of increasing earnings per share by about $0.80 or 19%, should the purchase of stock occur in a single year. Bristol-Myers Squibb could also use the proceeds from divestitures to raise the dividend, but we consider this unlikely because the company already has the highest payout ratio in the drug industry.

However, we think that Bristol-Myers Squibb would utilize the bulk of this money to purchase additional pharmaceutical resources. While there are no real bargains out there, we think that this will remain the future direction of growth for the corporation well into the next century. Major pharmaceutical companies with market capitalization's of slightly more than $5.0 billion (excluding any necessary premium required to acquire them) include Marion Merrell Dow (already 70% owned by Dow Chemical), Syntex (chartered in Panama with only a 13% tax rate), Upjohn (heavily family owned and controlled) and Warner-Lambert (broadly diversified; not a good fit if Bristol-Myers Squibb divests its consumer businesses).

How this scenario unfolds is difficult to predict. If Mr. Heimbold becomes chairman and CEO next year, will he want to shed the businesses that we have targeted for divestiture? Will Bristol-Myers Squibb make a dilutive acquisition of size to strengthen its core business? We think that the company can support a 15% rate of growth in earnings per share without significant further restructuring. Furthermore, we doubt that its growth rates would increase significantly even if a major drug company was acquired. Our buy rating on the stock is not dependent on restructuring. We think the stock offers excellent value, even with its current portfolio of businesses, and offers total return of 18-20% through 1995 with its current structure. In our opinion, further signs of restructuring beyond Drackett would enhance the stock's multiple.

It will be interesting to see how much of this theoretical divestiture plan comes to pass. The key event to watch in the next six months or so is any announcement made by Bristol-Myers Squibb's chairman and CEO, Richard Gelb. Should he choose to retire, we think that major restructuring will follow. Stay tuned.

Analysis of two divisions that could be sold

Toiletries, beauty aids & household products. This division is comprised of hair coloring products, beauty appliances, antiperspirants and household products (Drackett). Worldwide sales have been flat at $1.8 billion since 1988, and its collective operating profit margin has remained in the 17-18% area for several years. We think the divested value of the individual pieces would be $2.6 billion, as shown in Table 14. In our judgment, it will be the first entire division to be sold following retirement of the chairman. (As noted, the sale of Drackett has already been completed.)

Clairol. As shown in Table 14, we think the Clairol hair coloring business is worth 1-1.5 times sales, or $669 million, based on our 1992 sales estimate of $535 million. Its major brands such as Nice 'n Easy, Miss Clairol and Loving Care would be attractive to companies with worldwide hair coloring franchises such as L'Oreal and Revlon.

Beauty appliances. The beauty appliance business is less attractive, and we think that Bristol-Myers Squibb may have already tried to sell it without success. Its major products include mirrors, hairsetters, styling brushes, hairdryers, etc. We value this business at 0.5 times our 1992 sales estimate of $120 million, or $60 million. Logical buyers include Conair and Sunbeam Oster.

Antiperspirants. Based on the purchase of Mennen (sales of about $400 million) by Colgate Palmolive for $670 million, we think that Bristol-Myers Squibb's antiperspirant business is worth 1.5-2.0 times our 1992 estimated sales of $210 million, or $367 million. Its

leading products are Ban and Mum. Logical buyers for this business include Procter & Gamble, Colgate Palmolive and Benckiser.

Drackett: Already sold for a good price. The one divestiture that Bristol-Myers Squibb has already completed is its Drackett household products division. We estimate 1992 sales of $600 million for this business. Its leading products include Behold, Drano, Endust, O-Cedar, Renuzit, Vanish and Windex, all popular brands. This business was sold for $1.15 billion, or almost 2.0 times sales–the high side of analysts' expectations–to Johnson Wax.

Nonprescription health

This division is comprised of infant, adult and other nutritional products; analgesics; cough/cold products and skin care products. Worldwide sales are expected to approach $2.0 billion in 1992. Sales of this division were $1.6 billion in 1988, and growth has been in the mid-single-digit area for several years. Operating profit margins have consistently been in the 22% to 23% range, well above the high teens of the toiletries, beauty aids & household products division. The nutritionals business is especially profitable.

Given these high margins and modest growth, why sell it? There would be many willing buyers (several named below) for these individual businesses, and several would command high valuations of at least 3.0 times sales–far above the prices the toiletries business would fetch. In the past year, Sara Lee sold its Nicholas Kiwi (European analgesic business) division to Hoffmann-LaRoche for about 4.0 times sales. This sets a precedent for commanding even higher multiples than those utilized in Table 14 for several of Bristol-Myers Squibb's related businesses. We think the infant formula business alone with estimated 1992 sales of $885 million, could, command a price equivalent to the entire Toiletries, beauty aids & household products division with estimated sales of $1.8 billion this year.

Bristol-Myers Squibb's nonprescription health business would certainly command a high price–we estimate a total of almost $6 billion–that would allow the company to expand and dominate its two primary businesses, ethical pharmaceuticals and medical devices.

Infant formula. As mentioned, the infant formula business is likely to generate sales of $885 million this year, and we value this sector at 3.0 times sales, or $2.655 billion. Its leading brands include Enfamil and ProSobee. The company also sells Gerber Baby Formula based on an agreement signed with the Gerber Products Company in 1989. Another primary reason to exit this business is excessive regulation. In 1992, Bristol-Myers Squibb settled a two-year old price fixing case that will reduce this year's earnings per share by $0.06. Additionally, the Women, Infants and Children (WIC) program has taken almost all of the profit out of selling infant formula products to individual states under a bidding program. The only logical domestic buyer for this business is Abbott Laboratories, but anti-trust problems would preclude this from happening. We think that there would be several ready foreign buyers for this business including Sandoz, Ciba-Geigy and Nestle, all of which have significant infant formula businesses in international markets.

Other nutritionals. The corporation's entire nutritionals business should generate 1992 sales of $1.36 billion, and we place a value slightly in excess of $3.9 billion on this product line as shown in Table 14. In addition to its infant formula business, Bristol-Myers Squibb's sales of adult nutritionals are expected to reach $300 million this year, while its other nutritionals (vitamin and mineral supplements, etc.) should chip in sales of $175 million. We value the adult nutritionals at 3.0 times sales, while we value the other nutritionals at 2.0 times sales. The former is expected to fetch $900 million, while the latter is expected to bring in $350 million. The logical buyers also would be Sandoz, Ciba-Geigy and Nestle.

Analgesics. This line is very mature with major products such as Bufferin, Excedrin and Nuprin. Sales in 1992 are expected to reach $460 million, and we think this business will command a price of 3.5 times sales, or $1.6 billion. The only real growth in this category is coming from line extensions such as nighttime versions of its leading brands. A long list of firms are potential buyers of this therapeutic area including American Home Products, Warner-Lambert, Hoffmann-LaRoche, Johnson & Johnson, Pfizer, Sandoz, Ciba-Geigy and Monsanto's Searle division. However, we think the most interesting buyer might be the Procter & Gamble/Syntex joint venture, which is about to file an application with the FDA for an over-the-counter version of the latter's prescription arthritis-analgesic drug, Naprosyn. Other recent OTC alliances such as Johnson & Johnson/Merck and SmithKline Beecham/Marion Merrell Dow would also show interest, in our opinion.

Cough/cold and skin care products. This business is quite small with 1992 estimated sales of $95 million. We think this line would command 3.0 times sales, or $285 million. Any of the companies listed in the previous paragraph would be logical buyers. Likewise, its skin care business is

relatively small with 1992 estimated sales of $45 million. Leading brands include Alpha Keri, Sea Breeze, Keri Lotion and Fostex. We think this business would command 2.0 times sales, or $90 million. Many companies would like to expand their dermatological lines, but Bristol-Myers Squibb offers little in the way of critical mass. Companies listed above likely would show interest, as would several additional organizations including Schering-Plough, Beiersdorf and Kao.

These various divisions of the nonprescription health business should collectively produce sales in 1992 of $1.975 billion and could be sold for 3 times sales, or $5.912 billion. As mentioned, the toiletries, beauty aids & household products business generated sales this year of $1.82 billion and could be sold for $2.60 billion. So if both divisions are liquidated, they could generate $8.513 billion pretax and $5.0 billion aftertax.

The Three J&Js

David Lothson

This year investors have been presented with three large restructurings by healthcare firms: Baxter International's pending spin-off of its alternate site businesses, Humana's planned division into a hospital company and an HMO and the recent merger of Medical Care International (outpatient surgery) and Critical Care America (home infusion) into Medical Care America. The first two have met with investor indifference: both stocks have drifted lower since their announcements. Investor reaction to the Medical Care combination has been anything but indifferent; while the combination itself has played to mixed reviews, the stock has lost more than half its value after announcing disappointing earnings prospects.

Does this poor record mean restructurings no longer work in healthcare? Not at all. Restructurings generally come in response to operating problems as in the cases of the Baxter and Humana deals. We think a restructuring crafted to enhance already strong businesses would not only be welcomed by investors but would create value for them. A perfect candidate for such a restructuring is Johnson & Johnson.

Why J&J is too big

How big is too big? In 1993 Johnson & Johnson's sales will exceed $15 billion, roughly three times its sales in 1980. Next year J&J 's three operating divisions–consumer products, hospital supplies and prescription pharmaceuticals–will each have sales of roughly $5 billion. Each of these businesses has dramatically different growth prospects, levels of profitability and returns. Almost no new product or business is incremental for a company of this size–not a major new drug (like EPO) or possible success in the fast-growing endoscopic surgery area.

A generation ago the combination of these increasingly disparate franchises under a common corporate structure made sense; but today the rationale is less and less compelling. The company's prescription drug operation is a high-growth, high-return business and, we believe, would be best run as such independent of the parent's other operations. By contrast the consumer products business is far less profitable and quite mature. Were it to be carved out from other operations it could be run for cash flow, paying out a large percentage of earnings in dividends to investors.

The company's hospital supply businesses have some emerging growth opportunities but remain heavily ladened with mature franchises. Operating independently, this segment could be more quickly repositioned to capitalize on its opportunities. Were the J&J family of companies to be divided into three along the lines of its three business segments, we think both the baby J&Js and investors would benefit. The separate parts are worth at least 10% more than the whole as currently constituted.

Relatively easy to break up

More so than most companies, J&J lends itself to a breakup. Not only do its businesses divide nicely into three separate segments, but J&J is both organized and managed in a highly decentralized fashion with significant

operating authority pushed to individual companies such as McNeil Pharmaceutical, Ethicon, J&J Consumer, etc. Like a number of larger companies that operate in diverse market areas, J&J management likes to highlight the interaction and "synergy" between various operating units, such as the transfer of prescription drugs to the-over-the-counter (consumer) businesses. Indeed as J&J's joint venture and marketing arrangements with companies such as Merck (over-the-counter drugs) and Olympus (endoscopy products) illustrate, management does not suffer from the not invented here" syndrome so common among multi-billion dollar companies.

Fifth largest drug company in North America.

The prize among the three J&J business segments is the pharmaceutical operation whose sales and operating profits have grown at a 17% annual rate over the past five years. It represented 54% of total corporate profits in 1991. With sales projected to approach $4.3 billion this year, J&J's drug business is the eighth largest drug company in the world and fifth largest in North American. It is comprised of several strong operating units including the Janssen, McNeil and Ortho pharmaceutical units, and the Ortho Biotech and Cilag units. About 50% of total drug sales arise from the prolific Janssen family of companies.

J&J's pharmaceutical operations have an impressive array of existing products as well as several exciting new compounds nearing commercial introduction. Unlike most drug companies that are dependent upon only a handful of drugs, J&J has an excellent balance with only 5 drugs whose sales exceeded $200 million last year, 5 more with sales of between $100 and $200 million and another 11 with sales in the $50 million phase with nearly a dozen in the final stages of evaluation (Phase III). Were it to operate as an independent entity, we project pharmaceutical earnings growth would approach 20% annually over the next five years, and the unit's standalone value would be $21-$22 billion or 66% of the existing J&J's total current market capitalization.

Hospital supply

In 1992 J&J's professional group has garnered most of the attention because of Ethicon's efforts to move into the rapidly growing less invasive surgery arena, a market where U.S. Surgical is the leader. Sales of professional products will near $4.6 billion this year (one-third of total sales) but last year represented only 25% of corporate profits. As a supplier of products to hospitals, the J&J family of companies is second only to Baxter International in the United States in terms of total sales. J&J's franchise in the hospital is very broad but, unfortunately, biased toward commodity products. Ethicon's $1 billion plus sutures franchise is the largest operating unit, followed by J&J Medical with nearly another $1 billion in sales, but both these sectors are mature and growing in the mid-single-digit range.

Growth in the hospital supply area is generated by smaller franchises such as J&J Orthopedics, Vistikon (maker of the disposable ACUVUE contact lens) and most recently the Ethicon Endo-Surgery unit. Over the past five years professional product sales have grown just over 12% per annum and profits slightly faster, but these businesses have the potential to do better, particularly if more mature, commodity-oriented operations are de-emphasized or sold. In addition, the professional group has the potential to re-focus its operations through the selective acquisition of attractive medical device franchises and other strategic alliances such as was recently made with the Japanese company Olympus, a leader in the manufacturer and sale of endoscopes, which J&J views as critical to its future growth in less invasive surgery. Were it to exist on its own, we estimate the professional group's independent valuation at roughly $8 billion.

Consumer products: sluggish cash cow.

J&J's largest business (35% of sales) is Consumer Products. Over the last five years this segment has dramatically underperformed the company, growing sales and earnings at 7.6% and 3.4% annual rates respectively. While J&J's consumer segment is filled with household brand names, it is, taken collectively, largely a mature business. The McNeil Consumer Products company, makers of Tylenol, along with feminine hygiene and J&J Baby Care products represent an estimated 75% of segment sales. In addition to a largely mature product line the consumer businesses face ever-increasing global competition and a tougher retailing environment.

Management is looking toward new product opportunities such as further Rx to OTC drug switches and SPLENDA (the artificial sweetener sucralose) to fuel growth in the 1990s. While we project a somewhat better sales performance over the next five years from these businesses, they remain an inherently lower growth operation as compared with the drug and medical device and supply franchises. They will, therefore, continue to penalize the company's overall performance and price/earnings ratio. Were it to operate independently we estimate the value of the J&J Consumer businesses in the area of $5 billion or roughly one times sales.

Market value could rise 10%

In summary, were Johnson and Johnson's three business segments to stand independently they would not perform better (grow faster, be more profitable) but would command at least a 10% higher aggregate valuation than the company as exists today.

But what would be the catalyst for such a change? Many other large, diversified companies have only entertained change after years of painful financial performance. The highest value for what are on balance very attractive businesses owned by J&J can best be achieved before and not after earnings turn disappointing. The "catalyst" for change at J&J in the 1990s may prove to be a less attractive domestic health care operating climate, one exhibiting more controls on pricing and utilization. As such the "operating" or "maneuvering room" necessary to survive and prosper may be only achieved through the operation of smaller, more focused business units.

Watkins Johnson: A classic case of unrealized value

Jack Modzelewski

Where's the value?

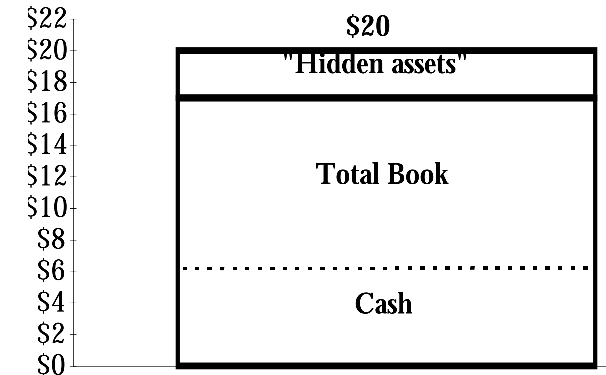
Watkins-Johnson is a defense electronics firm (producing some very sophisticated electronic equipment for detecting and monitoring electronic communications) with $270 million in annual sales. However, it has had flattish revenues and declining earnings over the past several years. WJ has expanded into commercial semiconductor equipment (20% of revenues) and environmental services (5%) over the past several years.

Earnings have been volatile, falling from a high of $2.46 per share in 1988 to a loss of $2.98 per share in 1991 (principally due to restructuring and environmental reserves taken because of continued weak profitability in the commercial operations). However, the long-term trend appears to be up. Not surprisingly, Watkins-Johnson stock has also experienced a significant decline, falling from $40 in 1986 to $13 today. Looking forward, our EPS estimates are $0.65 for 1992 and $1.10 for 1993.

With 7.5 million shares outstanding and a $13 share price, WJ's market capitalization is just under $100 million. Insiders own 6.5% of the stock and institutions hold 50%. The decline in the stock price indicates that the market has not recognized WJ's strong balance sheet. The company has no bank debt, and has a capitalized mortgage/lease obligation of $18 million for a debt to equity ratio of 15%. WJ's book value is $16 per share and the company has significant assets: Understated California real estate holdings and $6 per share in cash.

Chart 9

Watkins-Johnson: Hidden Value



How can defense companies respond to the changing defense spending environment?

Defense companies have various strategic options for responding to the contraction of the defense industry:

1. General Dynamics is demonstrating a very successful approach: Concentrating on its defense business and generating cash by restricting investments (principally by reducing capital expenditures and research and development).
2. Another approach, which has been employed very successfully by Bernard Schwartz at Loral, is to expand through acquisitions. The Martin Marietta-GE Aerospace merger is the latest incarnation of this strategy.
3. The final choice is diversification, which has *not* been successfully employed by the defense industry.

Rate of return forecasting within changing economic systems

Before deciding on the "proper" course of action for a defense company, a minor digression is in order. The principal investment implication of any major secular change is its impact on the rate-of-return of an investment. Consumers have had to deal with several mega-changes with regard to the rate-of-return on their investments in recent years. Automobile purchases have always had negative rates-of-return (except for certain Corvette models). Home ownership, which, due to demographics and favorable tax policies, had positive rates-of-return in the 1980's (particularly in California), now has negative return characteristics. Finally, a college education, which has always been associated with a positive rate of return, now appears to be taking on negative rate of return characteristics (i.e., the wealth of a high school graduate, who has saved $100,000 in college costs and worked for four years is probably comparable, if not greater, than that of a college student over the long run). Do we stop buying homes or paying to send our children to college? No, but the motivation for making the investment has turned from principally economic to include other considerations such as social status and self esteem.

Why a college education is similar to R&D spending

What, you might ask, do the changing financial return characteristics of a college education have to do with Watkins-Johnson (and the defense industry in general)? We would postulate that the rate-of-return for defense contracting is decreasing (as competition increases) while the risk of diversifying away from defense has increased (as evidenced by the poor economic records of companies that have tried to do so). This leads to our conclusion that, similar to a college education, the primary motivation for investment spending (R&D, capital expenditures, etc.) for a defense company is no longer primarily economic, but includes such issues as continuation of management salaries and corporate self-esteem.

Research and development as a function of stock price

Various studies have attempted to demonstrate the positive correlation between R&D spending and a company's stock price. The logic is "obvious:" As R&D spending increases, the net worth of a company increases even faster (up to a point). The key to this analysis is that the level at which R&D is a positive contributor to net worth is typically quite high. In the defense industry, however, the evidence suggests that R&D spending has a negative rate-of-return.

For example, Watkins-Johnson is spending approximately $30 million per year for R&D and approximately $8 million per year for capital expenditures. This is essentially investing for the future, quite similar to a college education. However, we would question the economic justification of WJ's action. The company is spending $38 million annually under the auspices of attempting to increase shareholder value, rhetoric very similar to that of General Dynamics prior to the appointment of Bill Anders as CEO. This investment spending, in fact, has led to decreases in net worth for WJ. WJ stock, having dropped from $21 to $13 share, now has a market capitalization of just $97 million. The savings from *not* making these investments could generate enough cash to repurchase the entire company in two years. WJ already has $45 million in cash, or $6 per share, and the buyback could actually be made in about one year!

Why is Watkins-Johnson not proceeding to implement the General Dynamics strategy?

It would appear that other, non-economic factors are keeping investment high, e.g., continuation of upper management salaries, maintaining a high tech image, etc.

What catalyst can change the company? For General Dynamics, the catalyst appeared to be the motivation for cash from the Crown family that owned 22% of GD stock. Bill Anders became chairman and pursued a cash generation strategy with more vigor than anyone had expected. For Watkins-Johnson, the large ownership block is not readily apparent; Mr. Watkins (chairman) and Mr. Johnson (vice chairman) own about 4% of the total outstanding stock. One issue is similar: Is the company willing to risk the potential competitive disadvantage of dramatically reducing its annual investments in R&D and capital?

General Dynamics, at $95 a share, sells at 175% of book value and will have approximately $35 a share in cash at year-end. Watkins-Johnson, at $13 a share, sells at 80% of book value and will have $6 a share of cash at year-end (and has not initiated any actions similar to GD). If WJ were to institute actions similar to GD, we would expect the stock to trade to the $20+ level.

Value even without a GD strategy

However, even without the GD strategy the case for investing in WJ stock is compelling. WJ has significant hidden assets–primarily California real estate that is

undervalued on WJ's books. In addition, the EPS trend at WJ is clearly up, and we believe that the potential exists for a significant positive EPS surprise in 1993. Our 1993 EPS estimate is $1.10, versus Street consensus of about $0.75. In addition, WJ's cash flow remains positive, and management has suggested that a share repurchase program will be initiated next year. Finally, Mr. Watkins and Mr. Johnson will complete their current management contracts in June of 1993, and we would expect that Keith Kennedy (President & CEO) will be given greater control of the company at that time.

Investment conclusion: Unrealized value

WJ is a classic case of unrealized value–at $13 per share with significantly undervalued assets and $6 per share in cash (and cash flow positive). We believe that the pending management change and a potential positive EPS surprise in 1993 will be the keys that unlock WJ's hidden value and WJ could trade to $18 (essentially book value) within the next 12 months.

De-conglomerating entertainment and media: Joint ventures will become Paramount

Christopher Dixon

The main restructuring opportunities in the entertainment and media sector will be to undo some of the consolidation excesses of the late '80s. If the shibboleths of that time were synergy and vertical integration between software and hardware suppliers, we expect the 90s to see a call for streamlining and focus on manageable business units. Managements in this sector, and particularly the cable industry, have a very sophisticated understanding of financial engineering and the impact that altering capital structures can have on equity values, both on the balance sheet and in the marketplace.

Restructuring will be driven by the desire to monetize perceived noncontributing assets while maintaining an interest in the spun off asset. Early examples of this strategy: In 1991 and 1992 Philips spun off a minority interest in Polygram, Sony brought Sony Music to the market, Time Warner entered into an agreement with Itoh-Cho and Toshiba (essentially divesting 12.5% of its film and television entertainment, programming and distribution assets), and Telecommunications created Liberty Media.

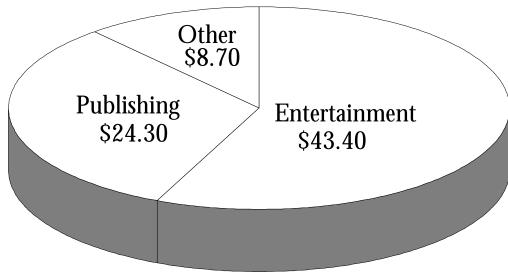
At the same time, the need to access capital to allow entertainment software manufacturers and distributors to ride the technology highway of the late 90s and adapt to a restructured global television market should make for some strange bedfellows. IBM, Microsoft, ATT and several of the regional bell operating companies, notably U.S. West, have all had discussions and in some cases entered into test joint ventures with various entertainment and cable companies. To date, nothing big has come to fruition. However, the emergence of digital audio-video standards and introduction of HDTV in mid-1993 can act as a catalyst to reshape the landscape.

At this stage, it's still too early to tell which way the winds will blow, but the experience gained by industry managements during the consolidation of the late '80s suggests that when the fog begins to lift from the horizon, companies like Time Warner, Telecommunications Inc. and Paramount will be superbly positioned to take advantage of the clearing skies.

Paramount Communications

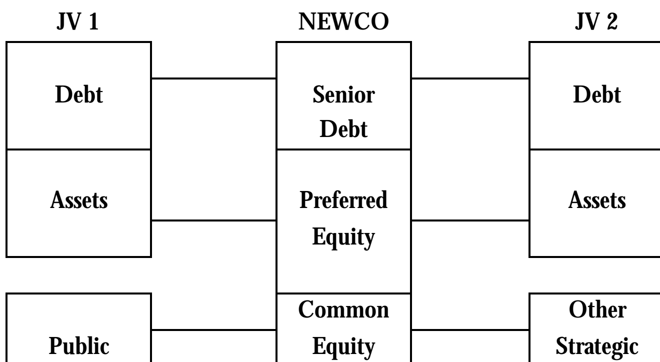
The opportunities outlined above can best be seen at Paramount. In one sense, Paramount is a holding company with core interests in the manufacturing and distribution of copyrighted intellectual property. The entertainment division does two things: Produces film and television programs, such as *Wayne's World* or *Cheers;* distributes product, both its own and other's, through the MSG network, the 50% owned USA network and theater chains both in the United States and abroad. PCI's publishing division manufactures a broad line of reading materials ranging from the Nancy Drew mysteries to college textbooks. An early experimenter with computer education, the company has also taken advantage of the shifting outlook for network television by leading the way for primetime syndicated television programming such as "Entertainment Tonight," "Arsenio Hall" and the upcoming "Untouchables" and "Deep Space Nine," the latest "Star Trek" clone.

Chart 10
Paramount Communications: Break-up Value



As a holding company, each of Paramount's operations is autonomous. Managements are held to their own budgets, and each unit could easily be spun off or divested. At the holding company level, Chairman Martin Davis spent much of the 80s transforming 1960s-style conglomerate Gulf + Western to the more focused corporation that exists today. Davis and his team took advantage of the go-go 80s to alter the portfolio of businesses enabling the company to compete in the coming convergence of entertainment, publishing, telecommunications and computers. Over 150 business units were shed; the company expanded its publishing operations; it entered into joint ventures to develop emergent distribution systems such as the USA Network; and it entered into attractively priced transactions that provided some strategic appeal and generated attractive returns–the rationale behind the recent theme park acquisition. During the last 18 months Paramount spent an estimated $1 billion to acquire $140 million in cash flow and improve its mix of assets.

Chart 11
Entertainment and Media: restructuring in the 90s



Results:

- Moves debt off balance sheet
- Carried return through preferred equity
- Monetization of noncontributing asset
- Nondilutive to joint venturers

Source: PaineWebber

What's next?

In our view the next transaction will be a large joint venture, which will be capitalized as follows: A new company will be formed with the joint venture. Each party, in return for assets contributed, will received preferred equity with an attractive dividend as well as common equity (Chart 11). The new entity will be appropriately leveraged, and additional equity required to capitalize the company will be raised through a public offering or sale to other strategic partners. The combination of enhanced off balance sheet leverage and a preferred dividend should offset the impact of dilution and generate enhanced shareholder value in the parent.

Who are the candidates for Paramount's joint venture?

Potential joint venture partners include many of the companies mention above. Should traditional television networks continue to lose market share, this is the structure that can help provide an exit strategy for General Electric's NBC unit, CBS or Capital Cities ABC. There the NEWCO would be comprised of Paramount programming and a network's advertising sales and operating infrastructure. Each party would hold a preferred interest; affiliates might own some of the equity with additional capital being raised in the public markets to help fund expansion plans. Scale economies and the further streamlining of operations (CBS might only contribute its entertainment division, while retaining news, for example) could accelerate growth rates and generate attractive returns for all participants. This is also the structure that could enable an IBM, Microsoft , ATT or Telecommunications to gain access to a vast array of publishing copyrights that would be distributed over the coming broad-based computer-linked information highway of the late 90s. Therefore, Paramount might contribute certain Simon and Schuster copyrights to the NEWCO, as the joint partner contributed memory capacity or distribution capability.

The longer view

During the 80s, the financial buyer ruled the day, driving up valuations and creating speculative opportunities that would realize a pay-off when the latest LBO came back to the market. In the 90s, by contrast, restructuring will be driven by a combination of strategic vision and financial engineering. Much of the inefficient pricing of the 80s has disappeared as the market and managments have come to recognize the value of the parts of companies as well as the whole. As Table 15 shows, Paramount is worth an estimated $75 per share should it be broken up into little

pieces. However, that is unlikely to take place. Few buyers are willing to pay the multiples remembered by sellers during the late eighties, and few sellers want out of the game. (As an interesting sidelight, many of the individuals who most profited by the 80s are now standing on the sidelines looking for ways to get back in. David Geffen, Victor Kauffman, Walter Yetnikoff and Barry Diller are all notable for their absence and rumored reemergence in the industry).

Table 15

Paramount Communications-valuing the parts

	Multiple	Value per share
Film	10	$7.80
Television/Library	12	28.70
USA Network (50%)	12	2.60
TVX	8	2.70
Madison Square Garden	8	1.70
Entertainment		43.40
Consumer publishing	10	4.10
Educational publishing	10	16.00
Non-US publishing	12	4.20
Publishing		24.30
Parks	8	4.00
Other assets		1.70
Net cash		3.00
Other	.	8.70
Total value per share		$76.00

Source: PaineWebber estimates.

The point is that the major restructuring in the entertainment and media industry will revolve around creating a core of assets that will enable a company to compete in the technology-driven world of the late 90s. Few players are willing to part with their current holdings at current prices but recognize the need to adapt their corporate strategies and combine with other partners to spread the cost of developing new technology-intensive businesses.

Therefore, look for joint ventures to rule the day until the spread between the bid and the ask closes, or leverage (i.e., available financing) reappears. As neither of these developments strikes us as likely in the current deflationary climate, financial engineering will rule the day. To that end, managements such as Paramount's that are experienced in divesting operations and rationalizing its operating mix to respond to a shifting market should have a distinct advantage. Financial engineering will be key to minimizing the dilutive effect associated with acquisitions.

So look to Paramount to set the agenda. A new management team under the tutelage of Chairman Davis is developing a competitive broad-based strategy. At the same time a conservative financial approach, best exemplified by the company's balance sheet and stand-alone approach to individual business units, makes Paramount an attractive joint venture for partners. Investors in Paramount, therefore, should be well rewarded as the company seeks additional ways to take advantage of the coming revolution in electronic delivery systems for entertainment and publishing software.

Climbing the ICI value tree

Andrew Cash

Last summer Sir Denys Handerson, chairman of Imperial Chemical Industries PLC, commonly known as ICI, announced plans to spin-off the company's science-based Zeneca from the company. The remaining assets, predominantly cyclical chemicals, would retain the ICI name. Because of investor suspicions that the spin-off will not go through by the middle of 1993 as proposed by management, the ADR price does not reflect the value of a planned spin-off.

The ADR recently traded at $60. The consensus view among British analysts is that poor economic conditions in the U.K. pose a stumbling block to the spin-off. However, we take ICI management on its word that the transaction is still on go. In fact, a tough economy is arguably the best environment for separation of Zeneca from ICI. Such an environment would better enable the company to restructure the separated parts, overweight with excess costs. A separated company will be more focused and have a clearer picture of how to improve productivity, the actual source of value that management is pursuing in our opinion. We believe the spin-off is not the end, but only the beginning.

Although dependent on how much value management wants to create, we have outlined three tiers of incremental value. The first tier, the Zeneca spin-off itself, could increase current ICI holders' value by $18 per ADR to

$78, a 30% gain. The second tier, break-up of the remaining ICI assets, could add another $33 per ADR. The third tier, an aggressive though realistic cost reduction program at both separated parts, could increase current holders' value by an astonishing $115 per ADR. Accumulating the three tiers of value, there is potential for a whopping $166 per ADR in additional value ($18 + $33 + $115). This would increase the value of ICI to $226 per ADR, a 277% gain over the recent ADR price (see Chart 12 and Table 16).

Chart 12

Imperial Chemical Industries: Three steps to value

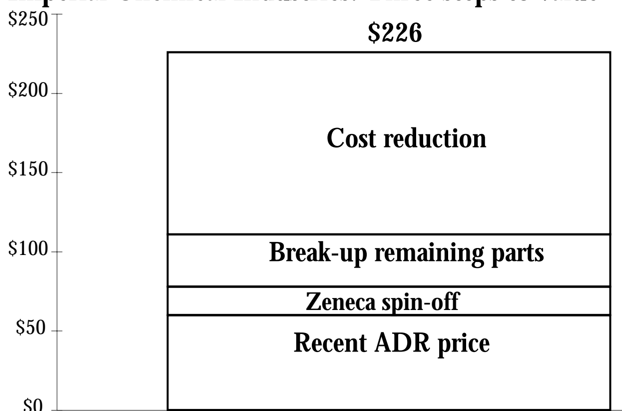


Table 16

Summary of three-tier value tree

	Incremental value	Cumulative value	Cumulative percent gain over recent price
Recent ADR price		$60	—
Incremental values			30%
Zeneca spin-off	$18	$78	
Break-up remaining ICI parts	33	111	85%
Cost reduction	115	226	277%

The world's third biggest chemical company

ICI is the third largest chemical company in the world (behind DuPont and Bayer) with estimated sales of 11.6 billion pounds sterling, or $20.9 billion. ICI is slightly larger than Dow Chemical, over twice the size of Monsanto, and four to five times the size of Union Carbide. As Table 17 shows, ICI is highly diversified.

Zeneca, with sales of about 4 billion pounds sterling, or $7.2 billion, includes three major businesses: pharmaceuticals, agchemicals and specialty chemicals. The pharmaceutical business ranks about 20th in the world with sales close to $3 billion. Tenormin beta-blocker, its leading drug, has the highest market share in its cardiovascular category. Although it faced fierce generic competition in 1992, overall pharmaceutical segment sales and profits remained flat during the year because of new drug launches in the last couple of years. New high growth drugs, made possible because of a $400 million R&D budget, include Zoladex, used to treat prostate cancer; Zestril, an ace inhibitor; and Diprivan, an anesthetic used in critical care situations.

Table 17

ICI Profile

Millions pounds sterling

	1991		*1992E*		*1993E*	
	Sales	Oper. profit	Sales	Oper. profit	Sales	Oper. profit
Zeneca						
Pharmaceuticals	1588	538	1592	524	1751	543
Agchemicals	1365	144	1324	87	1377	96
Specialty chemicals	984	38	1189	37	1232	51
Total	3937	720	4105	648	4360	690
ICI						
Paints	1588	118	1558	117	1620	130
Explosives	536	54	538	37	554	55
Materials	2037	(20)	1818	(38)	1873	(25)
Industrial chemicals	3612	132	3143	48	3269	65
Regional/other	1246	29	1167	(27)	1214	6
Eliminations	(468)	-	(707)	4	(800)	4
Total	8,551	313	7517	141	7730	235

The company's agchemical business is home to the second largest herbicide producer and 5th largest seed or plant breeding producer. This business is well positioned to support Zeneca's growth prospects, although it was hurt last year because of lower sales to the East Bloc and C.I.S. The specialty chemicals business, based on proprietary technology and application, should do well in the future after suffering from a slow economy. This latter segment includes key ingredients used to manufacture pharmaceutical compounds, inks and detergents just to name a few.

The new ICI, (i.e., excluding Zeneca) would be a $15 billion business comprised of a highly diversified group of chemical segments. The paint segment is the largest of its kind in the world and serves the housing, auto and specialty markets. Despite tough economic conditions in these markets, the paints segment has experienced flat profits. Like paints, the explosives segment is the largest in the world. Hurt by a downturn in the mining industry, it is positioned for recovery. The materials segment includes engineering plastics for the transportation and construction industries. It too has been hurt by the European recession. The industrial chemicals segment and the regional segment (also industrial chemicals but international in scope) have been hurt by the recession around the world and excess supply industry wide.

The opportunity

A common thread running through each of ICI's businesses (including Zeneca) is "world scale." Through an aggressive acquisition strategy and heavy internal investment, ICI pushed hard to be the biggest in its respective business areas. In our opinion management went overboard, incurring excessive overheads in the form of people and hard assets. Therein lies the opportunity. By separating the businesses, it can unravel the excesses built up over the past decade.

Tier 1 value

The first level of incremental value could come from the spin off of Zeneca as already proposed by management. Although we do not have the details such as resulting capital structures, Table 18 illustrates the possibility that the sum of the parts is greater than the whole. As shown, the sum of the two parts is $18 greater than the recent ADR value of $60. We assumed that Zeneca would earn $2.50 per ADR. This equates to the pro rata share of ICI's (pre spin-off) earnings estimate for 1993. Table 19 provides this detail.

As with many chemical companies, we used dividend yield to forecast the value of the remaining ICI assets.

Table 18

ICI Estimated spin-off values

Zeneca	$2.50 earnings/ADR x 13 P/E	= $33
ICI	$2.70 dividend at 6% yield	= 45
Combined trading value upon Zeneca spin-off		= $78

Table 19

ICI prorata earnings, 1993 estimate

	Oper. profit (mil. pounds ster.)	%	Per ADR earnings Total	Per ADR earnings Prorata
Zeneca	639 mil ps	69	3.60	2.50
ICI	286	31	3.60	1.10
Total	925	100	—	3.60

Tier 2 value

As mentioned earlier, we believe management will go beyond the spin-off to create value. The remaining ICI assets would be ripe for doing just that. In this level of incremental value creation, we assumed that the paint and explosives assets are spun off and the remaining businesses are sold to third parties. Table 20 indicates incremental value of $33 per ADR. Note that ICI's working capital at the end of the second quarter exceeded its debt. Therefore, we omitted any consideration for debt to reduce the values illustrated in Table 20.

Tier 3 value

This final increment of value of $115 per ADR involves raising ICI's and that of Zeneca's productivity through headcount reductions. We arrived at such an incredible figure simply by assuming that ICI and Zeneca, collectively, can increase its sales per employee up to that of Dow Chemical. If it did so, it could increase earnings by $7.30 per ADR. Capitalizing this at ICI's recent price earnings multiple yields the $115 per ADR increment. We assumed that the cost per ICI employee, taken from the 1991 annual report, is $40,000 and the reduction in employees is 51,000, down to 77,000. At this level ICI and Dow would each have sales in the $300,000 area. Dow Chemical is a reasonable benchmark because its product mix is somewhat similar to ICI's and it has one-third of its business in Europe versus 46% for ICI.

Table 20

ICI break-up

Paint:		
130 mil ps operating profit x 1.8 $/ps x (1-35% tax) x 12 P/E	=	$1,825 mil
Explosives:		
55 mil ps operating profit x 1.8 $/ps x (1-35%) x 10 P/E	=	645
Materials:		
1,873 mil ps sales x 1.8 $/ps x 1 times sales transaction price	=	3,370
Industrial chemicals:		
3269 mil ps sales x 1.8 $/ps x 1 times sales transaction price	=	5,885
Regional/Other:		
1214 mil ps sales x 1.8 $/ps x 1 times sales transaction price	=	2,185
Total	=	$13,910 mil
Value per ADR		$78/ADR
Less: ICI value upon Zeneca spin-off (Tier 1 value)		$45/ADR
Incremental value from ICI break-up		$33/ADR

ps=pounds sterling

RJR Nabisco: More brands could be sold

Wolfgang Armbruster & Emanuel Goldman

RJR Nabisco should continue to be at the forefront of financial and operational restructurings. Despite having undertaken numerous exchange offers, equity and debt issuances and countless asset sales, RN is still a prime restructuring candidate. The catalysts that led to previous restructurings remain in place:

- ***Restive majority owners and management team*** committed to maximizing shareholder values. The firm of Kohlberg, Kravis and Roberts has nearly $5 billion invested in RN. Consistent with that philosophy, assets that do not demonstrate growth potential are being divested.
- ***LBO mentality*** that nearly everything is for sale at the right price. Management has explicitly stated it will consider selling any asset that creates value for its owners.
- ***Near- term vesting of management options*** beginning, for the most part, in 1994. RN's management team is incentivized to raise its stock price over the next few years.
- ***Large debt load*** that can be whittled down quickly by the sale of non-strategic assets.

Divesting Planters and LifeSavers. . .

Under certain circumstances, we envision RN restructuring its food operations through the sale of at least two divisions: Planters and LifeSavers. Although neither unit is for sale and both are capable of growing at high single-digit rates, they may be of greater value to competitors with stronger channels of distribution.

Planters Nuts, a great brand franchise whose 40% market share overwhelms the next largest competitor's 10% share, should generate about $655 million in revenues in 1992. The challenge for RN is to grow by better penetrating the largest distribution channels in the salty snack market–the non-grocery channels consisting of convenience food stores, drug stores, and mass merchants. These areas are RN's weakest distribution channels. In contrast, Proctor & Gamble and Anheuser Busch, currently the second and third largest competitors respectively in the salty snack market, have made deep inroads in those channels of distribution. Planters Nuts could certainly have greater growth potential, and hence be worth more, under that type of ownership—particularly when compared against the actual and opportunity costs to RN in diverting the time and resources necessary to better expand in those distribution channels.

RN's LifeSavers division is in a similar situation. It enjoys top market shares in each of its hard roll candy, sugar-free breath mints and chunk bubble gum markets. This business exhibits slow but constant single-digit growth, yet RN competes for distributor attention in an area where it has limited strength–the "off the rack" channel. As RN's only product sold at rack counters, LifeSavers cannot grow as fast as a broader based competitor or chocolate company could. The principal competitors in the chewing gum field are Wm. Wrigley and Warner Lambert, each of which may be interested in solidifying its market position. In addition, a chocolate, based firm such as Nestle S.A. (that is known to be considering expanding its food operations) could further leverage its strength in the rack distribution channel by adding LifeSavers. We project 1992 revenues for LifeSavers and Carefree Gum of about $180 million and $146 million, respectively.

. . .and possibly other brands. . .

RN may also consider divesting its pet snacks operations, which include the Milk-Bone brand. Possible buyers include Ralston Purina, Quaker Oats and Heinz. We project 1992 revenues for the pet snacks business of about $150 million. Other nonstrategic brands such as Grey Poupon, A.1., Vermont Maid syrups and Brer Rabbit molasses, with estimated revenues of about $150 million, could also be sold.

. . .to pay down debt

Combined revenues for Planters, LifeSavers, Pet snacks and other non strategic brands are expected to approach $1.3 billion in 1992 with operating income near $200 million. RN should be able to sell these operations for at least 1 times sales, or 8 times operating income, realizing aftertax proceeds of at least $1 billion. (Note that RN recently sold its ready-to-eat cereal business to Philip Morris for almost 2 times sales and 10 times pretax income.) After paying down $1 billion of debt, RN should be left with equal amounts of equity and debt ($10 billion of equity and $10 billion of debt)—a welcome proposition for *both* equity and debt holders. Not only

would a bond rating upgrade be likely, but RN's common stock multiples should expand.

The sale of Planters and LifeSavers would have minimal impact on bottom line EPS and cash flow per share, but would bolster the balance sheet considerably. The market would then look differently at RN in one key regard: Risk. By paying off an additional $1 billion of debt, RN would not be highly leveraged, and should consequently see a multiple expansion due to a lessening of financial risk.

RJR is cheaper than Philip Morris, based on cash flow multiples

RN, Philip Morris and the S&P 500 currently trade at the following multiples of 1993 projected earnings and cash flows:

	Actual multiples			*Relative multiples*	
	RN(a)	**MO**(b)	**S&P 500**(c)	**RN/MO**	**RN/S&P 500**
EPS	12.0	12.4	18.3	97%	66%
Cash EPS *	5.9	9.8	8.8	60	67
EBITDA	5.9	7.4	8.9	89	80

(a) Based price of $8 3/4. (b) Based price of $80 3/4

(c) Based on index of 439

*Cash EPS = net earnings plus depreciation and amortization.

A modest 10% multiple expansion would still cause RN to trade at a 30% discount to MO's cash earnings multiple and on par with MO's EBITDA multiple. A 20% multiple expansion (which we believe achievable) would lift values to the $11-12 area That's 20-30% above today's levels. And that does not include further appreciation we forecast from earnings and cash flow growth over the next few years. Remember, we expect RN to grow bottom line EPS at a compounded 25% clip over the next four years.

A dividend is possible

An asset sale of this magnitude should also significantly increase the possibility of a common stock dividend. After reducing debt by $1 billion, RN would generate 5.0 times the amount of cash flow needed to pay its interest expense, compared to the current 4.6 times interest coverage. Additionally, RN has taken advantage of the current interest rate environment to extend its debt maturities; it recently issued $2.5 billion of bonds maturing after the turn of the century. This conservation of cash further permits the inception of a common dividend should Planters 'LifeSavers be sold.

All in all, the likelihood of further restructurings at RN remains high. Asset sales might be one key component enabling KKR to realize its ultimate goal—maximization of common stock values.

Restructuring Ball Corporation: #2 but trying harder

George Staphos

Of the companies we follow, Ball Corporation is most likely to restructure. The company has actively reengineered itself financially and operationally over the past decade, but with only modest success: BLL shares have been stuck around $25-35 since the fourth quarter of 1987. As a result of these moves, Ball has become the "Avis of packaging"–#2 or lower market shares in all of its business units, despite having a modern, efficient plant base across its system ("trying harder"). Due to earlier diversification efforts, BLL missed opportunities for strategic acquisitions that would have built more market share in both its metal and glass packaging operations.

BLL already announced in August 1992 a spurious restructuring that did not boost the share price. It consisted of distributing to shareholders via dividend a mix of small, diversified businesses. Although the market initially reacted unfavorably–shares fell as much as 17% after the announcement–the move indicated that the firm is inclined to restructure. In November, we received further confirmation of Ball's desire to refocus on packaging with the announced acquisition of Heekin can for $27/share in Ball common stock.

In our opinion, the market awaits the divestiture, for cash, of Ball's aerospace business. Such a move would free up an estimated $140 million, which could be used either to pay down debt, which is high today or to purchase shares. Until recently, an acquisition within the can business was also a possibility, but with Crown Cork & Seal's purchase of Van Dorn there are no good candidates left. Our analysis indicates that of these options the better is a share repurchase (Table 21). The upside potential from our restructuring scenario is 5-10+%, which is not dramatic but nevertheless compares very favorably with what many stocks will return over the next year. With the shares having declined 12% on an absolute basis and nearly 13%

versus the S&P 500 in 1992, management might well be inclined to make this shift.

Table 21
If Ball spun off its aerospace business, how could it best use the funds?

Option	Approx. percent change in value
Retire debt	5%
Buy in shares	10

Base forecast for Ball

We currently forecast Ball to earn $2.55 per share in 1993. This includes about $0.25 per share contributed by Ball's home canning, metal decorating and zinc businesses, which will be spun off to shareholders in 1993, and $0.05 per share in dilution from the Heekin transaction. Given that BLL has been trading at about 12-13 times x this estimate, for the purposes of this analysis we assume that it will trade at roughly $28-30 on $2.30 of pro forma earnings after the spin-off.

We think that BLL could get $140 million by divesting the aerospace business. Ball Corp. operates a $300 million aerospace business involved primarily in NASA and Department of Defense surveillance technology and R&D operations. BLL is building commercial applications for the unit; we project that such sales could reach $45 million. One might ask, "Why does Ball hold on to this (at least to us) orphaned unit?" There are several reasons, including the low valuations currently being placed on aerospace/defense companies, and because a divestiture would initially be dilutive to the company's EPS. Who would buy? Logical purchasers of Ball Aerospace could be any of the major defense firms including Martin Marietta, Loral, E-Systems, Rockwell and Lockheed. All maintain operations similar to Ball Aerospace, which is R&D driven.

What is Ball aerospace worth?

We forecast aerospace to generate $290 million in sales and $21 million in operating income in 1993. Using 60% of sales and 10x earnings valuation multiples, we believe that aerospace could fetch about $160 million. By comparison, we estimate that its book value is $175 million. We then reduce this by a $20 million guesstimate for taxes, to derive total BLL proceeds from such a transaction of approximately $140 million. Our P/E multiple represents an 11% premium to the average 1993E P/E of 9x for the above-mentioned defense companies, to reflect a control premium.

What to do with the funds? Two alternatives

Pay off debt. As mentioned earlier, one obstacle to the divestiture is that it is initially dilutive if BLL solely pays down debt. Our response is that BLL's interest savings will receive a higher multiple valuation than its aerospace earnings.

We forecast that Ball will earn $2.30 in 1993. If Ball paid down $140 million of existing debt at 8.5% blended interest, our new EPS estimate is $2.10-2.15. Such earnings should be valued at 14-15x given other pure-play packaging stock valuations. The resulting valuation is $29-32 versus our expected $28-30 share price discussed earlier.

Buy back shares. In Table 2 we remove aerospace's results, but do not pay down debt. The resulting earnings forecast is $1.85. Using $140 million to buy back 4.5 million shares (i.e., at approximately $31 per share), would leave 24.6 million shares outstanding, resulting in a new EPS estimate of $2.20-2.25. Using our pure-play valuation range, we arrive at a target price of $31-33.

Would BLL actually want to do this? Perhaps not. Part of the reason why Ball Corp. did a secondary offering in 9/91 was to increase the liquidity of its shares. In fact, average monthly volume has increased to roughly 1.0-1.5 million shares, from the previous 0.5-1.0 million shares/monthly prior to the offering.

Nevertheless, given Ball's current 13x P/E, it would have to obtain a 12% pretax return for any investment to be anti-dilutive. Currently, BLL earns an average 10% operating profit to assets, below this hurdle rate, so a buy-back should be considered even if it makes BLL shares less liquid.

Catalysts and barriers to an aerospace divestiture

One of Ball's internal issues that has hampered the company is its overly deliberate method of evaluating strategy. Ball Corp. passed on several beverage acquisitions in the 1980s, while competitors moved swiftly to purchase assets and realize synergies (i.e., Crown Cork's very successful and quick purchase of Continental Can in 1990). This would bias Ball to "stay the course" rather than make any of the moves we outline.

In addition, there are internal issues at Ball that would need to be resolved prior to the divestiture of aerospace. Two of Ball's former chairmen continue to be supporters of the business. They are also very large shareholders in Ball Corp.

However, management appears to be changing its philosophy–witness the four packaging acquisitions since 1989, and the spin-off announced in August. Although we do not believe that aerospace will be divested overnight, we do believe that it will inevitably be jettisoned in the future.

Building the New Tandy Corp.

Margo McGlade

Today Tandy is a more interesting investment opportunity than it has been for the past decade. It is still too early for us to recommend purchase, but it would become attractive if it is apparent that it is successfully restructuring its business.

Tandy has fundamentally changed its strategy over the past two years, moving away from a technology and manufacturing based strategy into retailing. Beyond updating its nationwide Radio Shack chain, Tandy now has two new retailing formats, Computer City computer superstores and The Incredible Universe, which it plans to roll out over the next five years. Currently, Tandy's store line-up looks like this:

	No. of stores
Radio Shack	4,553
Incredible Universe	2
Computer City	3
The Edge	16
Video Concepts	79
McDuff	235
Total	4,888

The diversion of resources into retailing from technology/manufacturing will in and of itself change the complexion of the company. However, to maximize shareholder returns from the new strategy, failures of past strategies will need to be cleaned out. As Tandy divests or downsizes businesses that no longer fit the company's future, it will be able to sell some divisions at a profit, but is likely to take substantial write-offs to rid itself of others.

Manufacturing/marketing

The healthy businesses that Tandy may divest are a) Memtek Products, manufacturer and marketer of Memorex brand audio and video tape and consumer electronics hardware, and b) O'Sullivan Industries, a well regarded office furniture manufacturer. Each generates about $200 million in annual sales. We believe the book value of both companies is below market value, especially O'Sullivan. Sale of one or both of these divisions would generate capital gains for Tandy. In our view, both companies would be much more valuable to a strategic buyer than to public investors, so Memtek and O'Sullivan are not good candidates for stock spin-offs.

We do not expect Tandy to sell manufacturing facilities that make products sold through its retail channels. These facilities make everything from personal computers to coax cable to stereo speakers–products that are sold both through the Radio Shack stores and to third parties. The sale of manufactured product to third parties will probably remain an opportunistic and somewhat volatile part of Tandy's business. For instance, sales of OEM personal computers are declining in fiscal 1993, but the facilities are being used to produce digital compact cassette players that Tandy is making for its own stores and for sale to other electronics companies and for manufacture of its new interactive video product.

Europe has been a struggle for Tandy. Last year, the company took a write-down for excess inventory and branch office closings at its Victor division, acquired in 1990. It has changed the name of the business from Victor Technologies to Tandy/Grid Europe. There may be further write-offs in Europe, an arena where Tandy's exposure should be very limited, in our opinion. However, sales in Europe in total were up 5-6% in the first fiscal quarter.

Retail

The Incredible Universe format is meant to displace traditional consumer electronics superstores, including, in some cases, Tandy's own name brand electronics retail stores. We look for Tandy to take a market by market and, in some cases, store-by-store approach to determining store closings at McDuff. We would not expect to see more than 20% of the stores closed in an initial pass at downsizing the business. Write-offs for store closings would include undepreciated leasehold improvements, the present value of remaining lease obligations, inventory that could not be transferred to other stores and some portion of customer receivables associated with the closed stores. Some of the costs could be recouped by subleasing the store or by turning an old McDuff into a Computer City store.

We would estimate each store costing $100,000-300,000 to close, but the company would provide no guidance on this figure. To date, Tandy has not commented on the operating performance of the McDuff stores near its Incredible Universe store in the Dallas area. Assuming Tandy chose to close stores with losses or very little profit, the earnings stream could be helped by closings.

Stock market reaction

All else being equal, we would expect any restructuring moves on Tandy's part to be received positively by the stock market. We also believe the first restructuring will not be the last. As the company continues to refocus its strategy, it will become increasingly clear which assets are going to be productive and profitable long term and which are not. Therefore, further adjustments are likely later on. Management is still hopeful about some of its businesses that may not make sense longer term, such as Europe and self-manufacture of personal computers. The performance of the Radio Shack chain and investors' confidence in this format longer term will remain the most important investment consideration for Tandy's stock price near term. Radio Shack still dwarfs the new retail businesses in size and profitability. The ability of Radio Shack to remain a competitive cash generating business in the future is critical to fund growth of the new concepts.

Management changes

Radio Shack is being run at present with an office of the president consisting of three individuals with extensive Radio Shack experience. The company's strategy is becoming more clearly defined, with an emphasis on marketing the consumer electronics accessories business more aggressively to the consumer, upgrading the consumer electronics offerings with better quality product and more consistent value pricing, and reducing inventory exposure to personal computers while retaining a presence (especially in multi-media applications) for personal computers. Tandy's strategy at Radio Shack makes sense, in our view. The execution of the strategy still needs to be sharpened, and we would like to see a single strong leader in charge of the company's most important business.

Three pre-requisites for purchase

We believe it is too early to be convinced about the three things in which we need to have conviction in order to recommend this stock, namely:

1. The short-term costs to the balance sheet and to earnings of past mistakes will not be worse than already assumed in the stock price.
2. Radio Shack has a place in modern day retailing.
3. Tandy's new retailing concepts will be profitable long term.

Therefore, we remain neutral on the stock, but believe this story is more intriguing now than it has been for a decade.

Restructuring the rails

Anthony Hatch

Union Pacific: undone restructuring

Union Pacific is the last of the classic railroad/resource conglomerates (see Table 22).

Table 22
Union Pacific operations

Division	Percent of revenue	Percent of assets
UP Railroad	68%	68%
UP Resources	15%	16%
Overnite Transportation	11%	10%
USPCI	4%	5%

In 1990 UNP shelved plans to follow rival rail/resource company Burlington Northern's lead and break up the company into its component segments. It elected instead to improve operations at all four segments. To a great degree, UNP has succeeded. Operating levels at the three most critical units—U.P. Railroad, U.P. resources and Overnite–have gone from already good to much better. The jury is still out on USPCI, although its size makes it relatively unimportant.

Was this, therefore, the wise tack? A look at the post-restructuring story at the pure Burlington Northern and progressively purer Santa Fe suggests it was not. BNI and

SFX stock prices have outperformed UNP since their respective break-ups (led by the newly separated, once disliked railroads thanks to the developing renaissance theme). See Charts 13 and 14.

Chart 13

For the most part the stripped railroad Burlington Northern has outperformed the UNP conglomerate

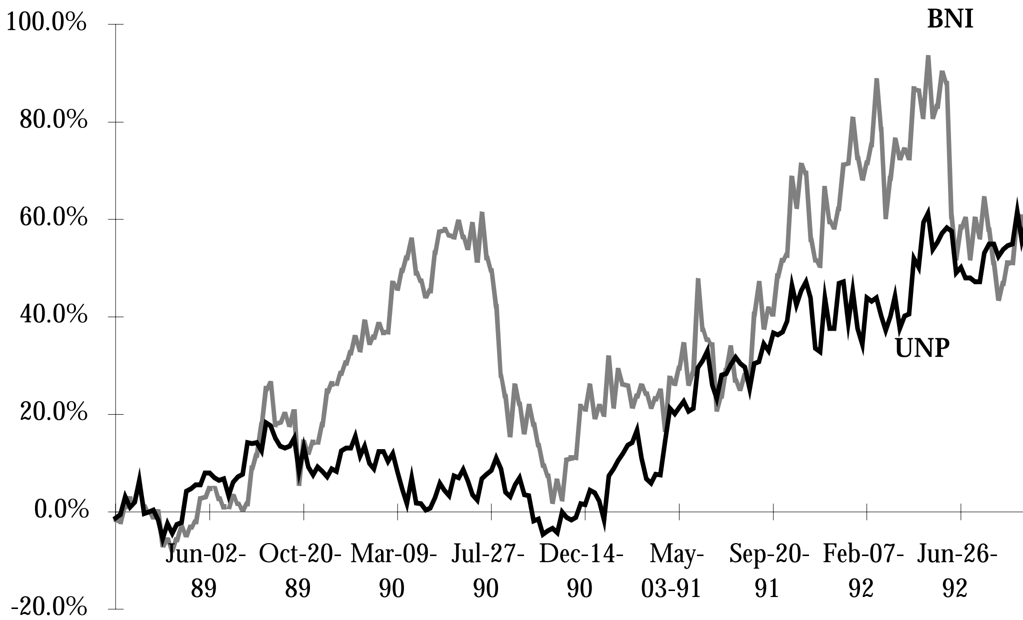
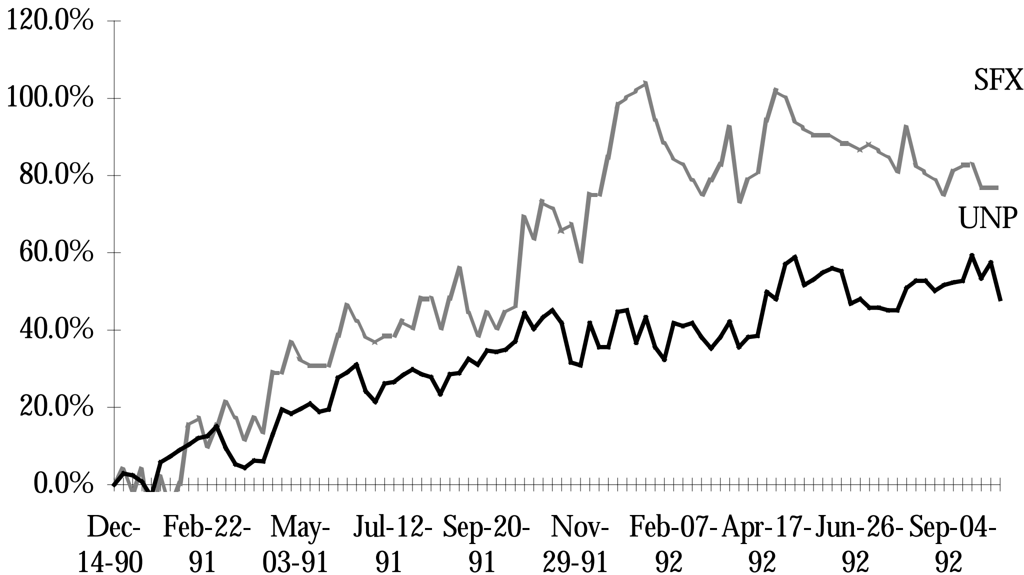


Chart 14

Over the long run the stripped railroad Santa Fe has outperformed the UNP conglomerate



We've included a very rough, "back of the envelope" look at how UNP might be trading if separated (see Table 23). It shows that it could boost the stock price to $70.00. Keep in mind we expect no restructuring news from the company, and if it were to happen it would likely be in reverse order of asset size and strategic importance, not to mention shareholder interest (i.e., USPCI might be first, followed by Overnite, etc.).

Table 23

Estimated breakup value

	EPS 1991	1992E	Industry multiple	Implied price	PW Est. multiple	Implied price
Railroad	1.72	1.92	15.56	$29.89	16.50	$31.69
Overnite	0.25	0.27	19.25	$5.26	20.00	$5.47
USPCI	0.05	0.05	20.00	$1.03	20.00	$1.03
Cash flow						
UPR*	2.92	3.19	7.50	$23.93	10.00	$31.90
Total				$60.11		$70.09

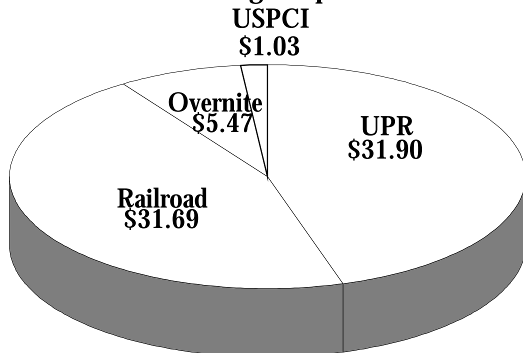
*UPR is in an industry generally evaluated by cash flows.

With the sex appeal of restructuring missing, UNP must be evaluated on its earnings prospects, which are excellent. We believe that UNP deserves its already achieved premium valuation (it is trading at 84% of the market), and hence its neutral rating.

Although Santa Fe has underperformed UNP in this period, Burlington Northern seems to have hit it just right (Chart 17). Note especially Burlington Northern's performance not only relative to the S&P 400 but also to its pre-restructuring performance.

Chart 15

Union Pacific: Valuing the pieces

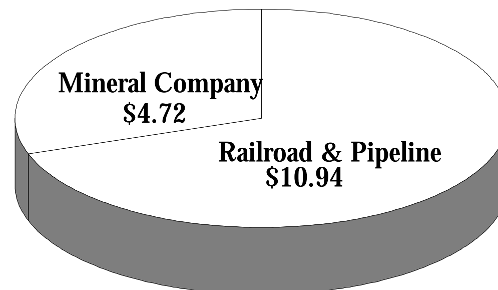


The forgotten rail restructuring

Santa Fe Pacific Corporation (SFX) is a western rail/resource conglomerate in a stage between that of Burlington Northern (a pure railroad) and UNP (un-restructured conglomerate). Santa Fe did, under some shareholder pressure, spin out the resource segment (Santa Fe Resources-SFR) and the real estate business (Catellus Development-CDX) in a two-part fashion culminating on December 4, 1990. While the timing was not fortuitous, we think the example of what happened to Burlington Northern earlier shows what would have happened to Santa Fe, a company burdened with heavy oil and California real estate exposure had it *not* restructured (see Chart 17).

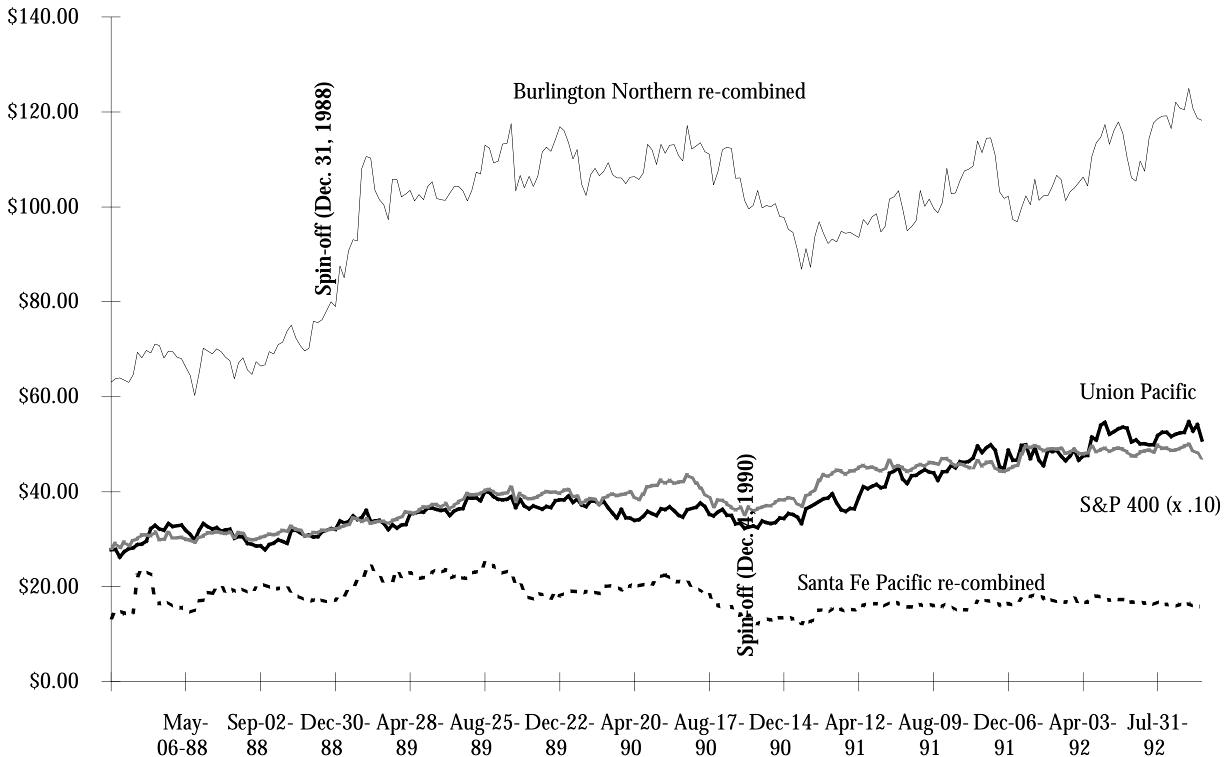
Chart 16

Sante Fe Corp: One piece is left



Looking forward, Santa Fe has one piece of restructuring to go—its minerals segment. SFM (9% of assets and 9% of revenues) is a coal and aggregate producer but is essentially a gold play (gold is 60% of SFM's revenues). SFM holds 6.5 million ounces of gold in a steadily-increasing reserve base, and produces it cheaply, at $165 cash cost for 1992 per ounce. Gold hedging activities enable the company to earn anywhere from $40 to $60 per ounce greater than the spot price. For the 1992 second quarter Santa Fe realized $400 per ounce with the spot gold price at $340, 43 % of 93's output is already pre solid at $386 per ounce. PaineWebber gold analyst Alex Latzer values SFM at $4.75 per SFX share (see Table 24).

Chart 17
Restructuring to add value-three case studies



This business, SFM, is officially considered a "candidate for spin" in the middle to the end of 1993. We think it highly likely that Santa Fe management will at least begin the restructuring process next year. SFX management has changed its potential timing and made it dependent on possible SFM valuation. While that sounds to us too much like Union Pacific (which hesitated, then chose not to restructure at all), Santa Fe Chairman Rob Krebs simply reminded us to "look at my track record" (the successfully completed spins of SFR and CDX out of SFX). We believe that SFX remains committed to the spin-off, to the ultimate benefit of SFX shareholders.

The spin-out of the gold company will leave a small, but still major railroad, the ATSF ("Santa Fe") Railway, which is an excellent play on the developing rail renaissance as it pertains to intermodal growth. Intermodal (transportation of highway-competitive trailers and/or containers on flat-cars) is already over 40% of Santa Fe's total rail business and the fastest growth segment (it's up 11.6% year-to-date). Santa Fe should earn close to $0.90 in 1993 without the gold company (our estimate is $115 with SFM), and given the current average major rail multiple of 12.15, Santa Fe should trade at about $15.50 ($10.94 + 4.75) over the next 12-18 months. Hence, it deserves our attractive rating.

Table 24

Santa Fe breakup valuation

	1991A	1992E	1993E
Railroad & Pipeline			
Total Railroad Oper. Income	255.4	310.9	382.2
Pipeline Revenues	27.1	26.3	34.5
Discontinued Opr Income	0.0	0.0	0.0
Other Income, Net	31.8	(0.9)	6.0
Interest Expense	207.6	165.6	158.6
Pretax Income	106.7	170.7	264.1
Tax Rate (%)	34.6	35.8	37.0
Provision For Taxes	36.9	61.2	97.7
Net Income (MM)	69.8	109.5	166.4
Earnings Per Share	$0.39	$0.59	$0.90

	1991A	1992E	1993E
Mineral Company			
Total Mineral Oper. Revenues	179.4	226.5	277.9
Total Mineral Oper. Expenses	119.9	145.2	175.8
Total Mineral Oper. Income	59.5	81.2	102.2
Interest Expense	18.8	15.0	14.4
Pre-Tax Income	40.7	66.2	87.8
Tax Rate (%)	27.0	27.0	27.0
Provision For Taxes	11.0	17.9	23.7
Net Income (MM)	29.7	48.4	64.1
Earnings Per Share	$0.17	$0.26	$0.35
Depreciation Per Share	$0.06	$0.11	$0.15
Cash Flow Per Share*	$0.23	$0.36	$0.41
Number of Shares (MM)	178.3	184.7	184.7
Valuation			
Railroad EPS		$0.59	$0.90
Industry Multiple		14.66	12.15
Implied Price		$8.69	$10.94
Mineral company cash flow		$0.38	$0.50
Industry multiple		11.00	9.50
Implied price		$4.14	$4.72
Combined price		$12.13	$15.67

1. SFM assumes 8.3% of SFX's interest exp.

2. Tax rate for SFM is 27%, similar to its peers.

3. SFM valuation is on a cash flow basis (Cash flow = Earnings + depreciation)

Note: PaineWebber E&P analyst David Bradshaw follows the UPR segment of UNP, as well as SFR and BR.

Streamlining Champion International

Lawrence Ross

Champion International, a paper and forest products com-pany with $4.8 billion in sales, has a product mix heavily weighted toward the printing and writing grades. It has a similar type of operation in Brazil. The basic facts on the company are shown in Table 25.

For a number of years, Champion has been regarded by many as an underperforming company . Because of its low price to book value ratio (currently 0.62) and the probable excess of real-world book value over nominal book value, which is $39 per share, two well known and highly successful corporate investors have taken major positions in CHA, leading to speculation that control of and/or direction of the company's affairs might change. These two investors, Berkshire Hathaway (Warren Buffet) and Lowes Corp. (Lawrence Tisch), actually have very different vantage points. Mr. Buffet owns a $300 million convertible preferred that provides an above average 9.25% yield; he can enjoy attractive returns regardless of the behavior of the CHA equity. Mr. Tisch, on the other hand, owns the common where the current dividend yield is 0.8%. Without stock appreciation over time, this will not be a successful holding.

Table 25

Basic facts on Champion International—1991

Total pulp/paper production 5.3 million tons

Acres owned or controlled: 6.5 million

	Dollars millions	Percent of total
Pulp/paper		
Net sales	$3852	80%
Operating income	216	97
Wood products		
Net sales	$934	20
Operating income	6	3
Total oper. inc.	$222	100
U.S.	$166	75
Foreign	56	25
Average EPS 1987-91	$2.75	
1991 EPS	(0.21)	

Current dividend	0.20
Yield	0.80%
Shares: primary	92.90 million
Average ROE 1987-91	9.40%
1991	1.00%

In looking at CHA as a possible restructuring candidate one does not immediately see divisions or assets that are inappropriate for a forest products company to own and are readily salable. The only peripheral operating asset is Nationwide Papers, a relatively small distributor of printing paper that would raise not more that $200-250 million or roughly $1.50 per share after taxes. The company's significant timber ownership of 6.2 million acres has a current market value that we estimate at roughly $2.5 billion. Here the company has been in the process of selling Pacific Northwest lands and has its lands in Montana up for sale. These Western lands have a substantial value, which we place at $1 billion. However, they are also income generators at the present time. Paying down debt with the proceeds would not lead the company, in our estimation, to earn more.

How to boost profitability

There seems no specific thing that CHA should clearly do to improve its fortunes. However, what might occur is a carefully thought out multi-pronged program such as was initiated in 1989 by Weyerhaeuser (which in the 1980s was also an underperforming company and investment). Beginning in the early 1980s, Scott Paper company did something similar. In the case of WY the plan involved some divestitures of inappropriate operations of which WY had more than does CHA. But most important, WY's plan is an attempt to raise the performance of continuing assets (such as paper mills, box plants, etc.) to the levels of profitability and efficiency attained by the best facilities in the industry. To emulate WY, CHA might do the following:

1. Sell its unbleached kraft business. CHA liquidated most of its unbleached kraft operations (linerboard plus kraft paper) in the mid 1980s, leaving a one-mill operation that doesn't really fit. The company has no conceptual dedication to the unbleached kraft market and probably could raise $250 million which could be effectively re-deployed.
2. Get rid of the 9.25% convertible preferred. This $300 million owned by Mr. Buffet could be liquidated at a 15% premium. The company could save $27.8 million after taxes annually or $0.15 per share by liquidating this investment (net of an imputed 6% for cost of funds). For now the company needs the equity for debt rating purposes.
3. Tighten up somewhat on headcount levels. CHA generated sales of $17,418 per employee in 1991 compared to a group average of $18,865, i.e., CHA was 7.7% below the average. To be sure, this type of calculation has a certain element of artificiality because different types of businesses, (e.g., converting, distribution, etc.) have different capital intensities and revenue per employee characteristics. Nevertheless, using this admittedly somewhat simplistic criteria, if CHA could reduce headcount levels to that of the average of five comparable companies, it could save as much as $75 million, or $0.50 per share annually. CHA has not announced, to our knowledge, any program of general cost reduction such as has been announced by many competitors, including IP, JR, MEA, SPP, W, PCH and, by implication, WY.

If this plan were implemented, it could boost the stock price by 20-30% if savings were capitalized at a 10-12 P/E. And there might be further stock price appreciation via a perceived change in company attitude.

Without such a restructuring program, and looking at CHA as it exists today, the company is primarily a printing and writing paper producer–grades suffering from the lowest operating rates in the industry. A return to late 1980s earnings levels, i.e., $4.00-4.50 per share, will be a long, perhaps very long, recovery process. The combination of over built markets in coated and uncoated printing papers, a slow rate of general economic recovery and a sharp deterioration in the consumption of uncoated free sheet relative to the economy all point to a long, slow earnings recovery in the absence of a major profit improvement program or sharply higher economic growth rates.

Financial Services: Three restructuring opportunities

Gary Gordon

Streamlining Household International

Household has taken a number of restructuring steps over the past five years. In 1989 it shed its manufacturing businesses and discontinued its commercial lending businesses at the end of 1991. However, the company could take two additional steps to restructure the company to increase EPS.

One would be to sell its overseas consumer lending businesses, located in the U.K. and Australia. Managing these relatively small businesses from Chicago is difficult. There are some but not many synergies with the major U.S. consumer franchise. Even the Canadian business, which is contiguous to the U.S. business, is largely run separately. None of these foreign businesses are salable today because all three are losing money or barely breaking even due to serious recessions in all three countries.

The current losses also make it difficult to analyze how much Household could add to earnings by selling these busi-nesses. However, the peak ROE for the businesses was about 13% in 1989. The domestic business is capable of earning 20% returns. At the minimum, selling at least the U.K. and Australian businesses would boost the P/E by reducing the perceived risk of the company in the eyes of investors.

Household's other suboptimal business is its individual life insurance company. The company has averaged a 9.6% return on equity over the past five years, about one-third to one-half of what the domestic consumer business has earned. The capital generated by selling the life insurance company could be reinvested in the domestic consumer finance business or perhaps used to buy back stock.

Great Western and H.F. Ahmanson : Acquisition candidates

We increasingly view these companies as acquisition candidates within two to four years. The reason is that both companies are essentially limited to one type of loan product, the adjustable rate home mortgage. While both companies did an excellent job of originating this loan during the 1980s, doing the same in the 1990s will be much more difficult. One reason is that originating ARMs is much easier when interest rates are high, because borrowers do not want to lock themselves into a fixed rate mortgage with a high mortgage rate. Second, portfolio lenders like H.F. Ahmanson and Great Western are meeting increased competition from Fannie Mae and Freddie Mac and their proxy loan originators, the mortgage banks. Finally, regulatory requirements such as increased capital standards have significantly increased the cost of originating home mortgages.

These adverse changes in the lending environment for Great Western and Ahmanson obviously make it difficult to achieve asset growth and therefore earnings growth. These two companies, along with most other thrifts, will face the choice of changing their approach to lending and investing or they will be acquired. The change in lending and investing would include either accepting more interest rate risk or becoming more like a mortgage banker.

Acquisition makes more sense because the powerful retail banking franchises of both companies could be married to the more diverse lending base of a commercial banker. Both H.F. Ahmanson and Great Western rival First Interstate's consumer banking franchise in California. These franchises will certainly be attractive to super regional banks that want a market position in California. We estimate the acquisition price of both companies to be in the $25 area once their current asset quality problems have clearly peaked.

Competition will force restructuring by high-cost Electric Utilities

Bert Kramer

Almost unnoticed amidst the hubbub of the campaign, a major new energy bill was signed by President Bush in October. For the electric utility industry, the key innovative element of the bill is competition. The new legislation amends the Public Utility Holding Act (PUPA) to allow a new class of independent power producers to develop non-utility sources of power. Anyone–including electric utilities, industrial companies, municipalities, etc.–can build a plant and sell power to other utilities. They would not be subject to regulations as a utility or as a holding company under the Public Utility Regulatory Policies Act. The new law also allows any participant in the wholesale market (one utility selling to another utility) to obtain transmission access to the grid through an order of the Federal Energy Regulatory Commission (FERC). There will be an overriding requirement to protect the reliability of the system. Retail wheeling–i.e., selling power to the utilities' own customers–was not permitted by the law. But many utilities fear retail wheeling will come someday.

Obviously, utilities with high costs and high customer rates per KWH are the most vulnerable to the onset of competition. Tables 26 and 27 list utilities in order of their rates per KWH and industrial revenues as a percent of total revenues. Competition in one form or another is coming, and investors should begin to evaluate their portfolio with that in mind. In the Northeast (Maine to Pennsylvania) customer rates are high in absolute terms. Consolidations to achieve economies of large scale production in that sector are certainly possible.

Two utilities that are vulnerable

There are two utilities whose particular cost structure (see tables) and industrial mix place them in a very uncompetitive position: Bangor Hydro-Electric (BRG) and Philadelphia Electric (PE). These companies have very high total customer rates and industrial rates, which make them vulnerable to competition. Furthermore, the industrial component is a relatively high percent of total sales; this means that competitors could seek out their industrial clients and the three utilities would find competing very difficult.

How will these utilities respond to competition?

Bangor Hydro is small and would doubtless seek to be taken over by a larger utility such as Central Maine Power. This deal has been discussed in the past and turned down. Philadelphia Electric might seek a merger with Pennsylvania Power & Light (PPL). The latter has some excess capacity, relatively low rates and is in the same state; the state regulators might encourage the move.

Impact on stocks

Broadly speaking, these events would be modestly positive for Bangor Hydro and somewhat bearish for Philadelphia Electric. More specifically, the following results might be anticipated:

1. The stock of Bangor Hydro is likely to rise.
2. The stock of Central Main is likely to be flat after an acquisition.
3. Pennsylvania Power & Light would consolidate with Philadelphia Electric. PPL would have to be offered financial incentives by PE and/or coerced by the state regulators. Therefore, its price would increase.
4. If a merger does not occur, Philadelphia Electric would survive but only after losing some business and market value.

Table 26

Total cost/KWH for electric utilities, 1991

Rank	*Company*	*Total cost per KWH (cents)*
1	Consolidated Edison of NY	13.53
2	SceCorp	10.26
3	Orange & Rockland Utilities	10.10
4	Pacific Gas & Electric	10.09
5	Atlantic Energy Inc	9.80
6	Central Maine Power Co	9.52.
7	Philadelphia Electric Co	9.45
8	Northeast Utilities	9.20
9	Boston Edison Co	9.18
10	San Diego Gas & Electric	9.11
11	Hawaiian Electric Inds	9.07
12	Public Service Entrp	9.89
13	New England Electric System	8.75
14	Centerior Energy	8.69
15	Eastern Utilities Assoc	8.35
16	DQE Inc	8.08
17	Commonwealth Edison	7.98
18	Niagara Mohawk Power	7.91
19	General Public Utilities	7.82
20	Detroit Edison Co	7.65
21	FPL Group Inc	7.63
22	New York State Elec & Gas	7.53
23	Baltimore Gas & Electric	7.48
24	Ohio Edison Co.	7.44
25	Tucson Electric Power Co.	7.38
26	Pinnacle West Capital	7.31
27	Pennsylvania Power & Light	7.06
28	Public Service Co. of New Mex	6.91
29	Nipsco Industries Inc	6.82
30	IES Industries Inc	6.66
31	El Paso Electric Co	6.58
32	Delmarva Power & Light	6.56
33	Carolina Power & Light	6.55
34	Dominion Resources Inc	6.30
35	Kansas City Power & Light	6.30
36	Florida Progress Corp	6.28
37	Potomac Electric Power	6.26
38	Entergy Corp	6.19
39	Teco Energy Inc	6.16
40	Illinois Power Co	6.11
41	Houston Industries Inc	6.10
42	Gulf States Utilities Co	5.94
43	Texas Utilities Co	5.94
44	OMS Energy Corp	5.93
45	Union Electric	5.80
46	Public Service Co of Colo	5.77
47	Central Lousiana Electric	5.70
48	Cipsco Inc	5.69
49	Southern Co	5.63
50	Nevada Power Co	5.56
51	Scana Corp	5.50
52	Oklahoma Gas & Electric	5.48
53	Cincinnati Gas & Electric	5.46
54	Duke Power Co	5.46
55	Cilcorp Inc	5.44
56	Central & South West Corp	5.41
57	Wisconsin Energy Corp	5.17
58	Iowa-Illinois Gas & Elec	5.11
59	Western Resources Inc	5.07
60	Ipalco Enterprises Inc	5.03
61	Northern States Power-MN	4.97
62	Otter Tail Power Co	4.97
63	Wisconsin Public Service	4.93
64	WPL Holdings Inc	4.90
65	Puget Sound Power & Light	4.74
66	Midwest Resources	4.69
67	Southern Indiana Gas & Elec	4.61
68	LGE&E Energy Corp	4.55
69	Portland General Corp	4.51
70	American Electric Power	4.48
71	Allegheny Power System	4.18
72	PSI Resources Inc	4.12
73	SouthWestern Public SVC Co	4.08
74	Minnesota Poer & Light	4.08
75	KU Energy Corp	3.99
76	Montana Power Co	3.99
77	Idaho Power Co	3.62
78	Citizens Utilities	N.A.

Table 27

Industrial revenues as a percent of total revenues, 1991

Rank	*Company*	*Industrial to total revenues (percent)*
1	Minnesota Power & Light	66.77
2	Baltimore Gas & Electric	40.41
3	Nipsco Industries Inc	40.28
4	Ipalco Enterprises Inc	38.52
5	Northern States Power-MN	38.28
6	Hawaiian Electric Inds	36.76
7	Gulf States Utilities	36.02
8	Philadelphia Electric Co	35.37
9	Otter Tail Power Co	34.48
10	Southwestern Public SVC Co	34.48
11	Detroit Edison Co	34.22
12	LG&E Energy Corp	33.49
13	Houston Industries Inc	33.05
14	Cipsco Inc	32.11
15	Nevada Power Co	31.73
16	Tucson Electric Power	30.96
17	CMS Energy Corp	28.83
18	Centerior Energy Corp	30.57
19	Pacificorp	29.98
20	Duke Power Co	29.97
21	Illinois Power Co	29.87
22	Wisconsin Energy Corp	28.83
23	American Electric Power	28.36
24	Cilcorp Inc	28.22
25	Central Maine Power Co	27.37
26	Entergy Corp	27.00
27	Southern Indiana Gas & Elec	26.55
28	Montana Power Co	26.55
29	Allegheny Power System	26.30
30	Iowa-Illinois Gas & Elec	25.97
31	Southern Co	25.93
32	Carolina Power & Light	25.89
33	Orange & Rockland Utilities	25.78
34	Ohio Edison Co	25.64
35	PSI Resources Inc	25.55
36	WPL Holdings Inc	25.42
37	Scecorp	24.37
38	Wisconsin Public Service	23.56
39	KU Energy Copr	23.09
40	Central Louisiana Electric	23.01
41	Central & South West Corp	22.55
42	Commonwealth Edison	22.45
43	General Public Utilities	22.31
44	Cincinnati Gas & Electric	21.37
45	Scana Corp	21.25
46	Oklahoma Gas	21.17
47	IES Industries Inc	20.87
48	Public Service Entrp	19.82
49	Pennsylvania Power & Light	19.79
50	New England Electric System	19.38
51	Idaho Power Co	19.37
52	Delmarva Power & Light	19.21
53	Niagara Mohawk Power	19.16
54	Union Electric Co	18.92
55	Potomac Electric Power	18.06
56	Midwest Resouces	17.53
57	Texas Utilities	17.43
58	San Diego Gas & Electric	17.13
59	Western Resouces Inc	16.59
60	DQE Inc	16.28
61	Eastern Utilities Assoc	16.01
62	New York State Elec & GAs	15.65
63	Northeast Utilities	15.54
64	Pacific Gas & Electric	15.47
65	Portland General Corp	15.31
66	Kansas City Power & Light	13.94
67	Puget Sound Power & Light	13.29
68	Atlantic Energy Inc	13.14
69	Public Service	12.54
70	Pinnacle WEst Capital	12.19
71	Teco Energy	12.07
72	Public Service Co of New Mex	11.79
73	Dominion Resources Inc	11.11
74	El Paso Electric Co	10.37
75	Boston Edison Co	10.06
76	Florida Progress Corp	8.41
77	FPL Group Inc	4.57
78	Consolidated Edison of NY	2.85
79	Citizens Utilities	N.A.

Restructuring Opportunity in A Special Situation

Matthew Diserio

Mark IV Industries, Inc.

Mark IV Industries has been in a perpetual state of restructuring since inception in 1969. The company started as a corporate shell and has transmogrified itself through a tireless series of acquisitions and diversitures. The pace of IV's evolutionary restructuring quickened in 1986 when IV launched its first of five sucessful unsolicited takeovers. Since then IV has increased its revenues from less than $50 million annually to more than $1.2 billion.

IV is best described as a collection of good operating businsesses with a very experienced management team whose focus is getting the most value for shareholders out of those businesses. IV currently trades at 11 times estimated 1993 earnings, which also equals free cash flow. This is a dramatic discount to the market, which currently trades at 18 times 1993 earnings.

The "conglomerate discount" of IV's stock masks the fact that IV's three major operating subsidiaries earn a significantly higher operating margin than other comparable companies. This is a disparity that has not gone unnoticed by IV's management, which owns more than 20% of the stock. IV's is a results-oriented management with a documentable track record of both consistently increasing earnings and creating value for shareholders. Incidentally, IV was one of the best performing stock on the NYSE since 1982, increasing more than 9200%.

The point here is that the four parts of IV are worth significantly more, perhaps up to 60% more, than the current value of IV as a whole. A breakup or spin-off analysis for most companies would be purely an academic exercise. But IV has a long history of managing both sides of its balance sheet with an enviable sense of timing and success. If the multiple continues to languish, a radical restructuring along the lines outlined is conceivable. At the very least, laying out the value of the pieces should give some comfort to investors and offer some downside protection to the stock.

What follows is a comparable valuation analysis of the four business segments that make up Mark IV. The results of that analysis are summarized in Table 28; detailed analyses of each segment are presented in Tables 29-36.

Chart 17a

Mark IV: Break-up value . . .

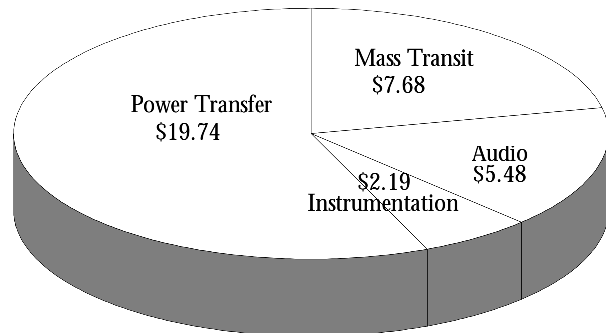
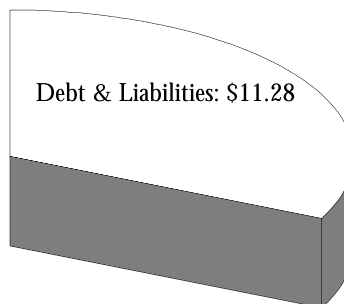


Chart 17b

Mark IV: . . . less debt and liabilities



Power transfer and fluid handling.

The largest segment at IV, accounting for 50% of total revenues or more than $600 million, is called Power Transfer and Fluid Handling. This segment manufactures industrial and automotive belts and hoses. Operating margins here are more than 10%. This is almost twice the margins of a group of seven comparable industrial and automotive parts manufacturers which currently are valued at between 10 and 14 times operating profit. The fact that IV splits nearly 85% of the U.S. market for belts and hoses with one other company—privately held Gates Inc.—helps to explain the richness of its margins. Incidentally, Federal Mogul announced in August that they were purchasing an auto parts manufacturing and distribution business from TRW for $213 million or nearly 12 times current operting profit. That business had operating margins of only 6%. Therefore, between the public comparables and this recent private acquisition a supportable claim could be made that IV's Power Transfer

business could be worth more than 12 times its $64 million operating profit,or $800 million, considering its high margins.

Mass transit and traffic control products.

This segment makes highway signs and the interiors for mass transit vehicles such as buses, subways and planes. IV enjoys 14% operating margins on $215 million in revenues which equals $31 million of operating profit. This margin is significantly higher than the 9% average of the few available comparable companies. Better than average margins exist in this segment for much the same reason as in power transfer. IV again has significant market share, between 60 and 80%, in most of the product categories in this segment. Believe it or not, the few comparable companies identified are trading at between 13 and 16 times operating profit. Although IV's margins in this segment are 50% better than those of the comparables, we will use the low end of the multiple range to be conservative. At 13 times operating profit mass transit would be worth $350 million.

Professional audio.

Here IV competes in what is approximately a $1 billion market. With more than 20% share, IV is more than twice the size of its next biggest competitor, Harmon Industries. Again IV's margins stand out on a comparable basis. Professional audio's operating margins, which are nearly 15%, are twice the the average for the six comparable companies. They trade at between 9-11 times operating proifit. At 11 times $26 million of operating profit, professional audio would be worth $250 million.

Other businesses.

The rest of the company consists of a group of businesses manufactures test, measurement and instrumentation equipment. These businesses do not have the tremendous margin premium to comparable com-panies. This group is made up of bits and pieces of previous acquisitions which do not fall into the three core businesses and for one reason or antoher have not yet been divested. The current 6% operating margin is similar to the levels of profitability generated by five other compar-ables, which are trading currently at between 10-13 times EBIT. At 12 times the more than $7 million of EBIT the "other" businesses would be worth $85 million.

To summarize our valuation analysis for Mark IV:

Dollars in millions, except per share figure

Power transfer	$800
Mass transit	$350
Professional audio	$250
"Other"	$85
Total	$1,485
Minus: Long-term debt	$440
Restructured equity value	$1045
Millions of Fully diluted shares	45.6
Value per share	$23.00

The capital gains taxes incurred on either the total liquidation outlined above, or a combination thereof, would be approximately $200 million. This liability would be reduced somewhat by recapturing the $80 million sur-plus in the pension fund. Capital gains tax would be essentially avoided by spinning off either all or some combination of the four subsidiaries to shareholders on a tax free basis.

Table 28

Mark IV: Summary valuation

Segment	*Estimated range of values*		*Per share (1)*	
	Low	**High**	**Low**	**High**
Power Transfer & Fluid Handling	$800	$900	$17.54	$19.74
Mass Transit & Traffic Control	300	350	6.58	7.68
Professional Audio Companies	200	250	4.39	5.48
Instrumentation & Other	85	100	1.86	2.19
Total Estimated Segment Value	$1,385	$1,600	$30.37	$35.09

	Estimated range	
	Low	**High**
Total Estimated Segment Value	$1,385	$1,600
Less: General corporate expense (2)	(74.4)	(55.8)
Less: Total debt net of cash	(419.3)	(419.3)
Less: Other LT liabilities	(39.1)	(39.1)
Estimated Equity Value	$852.2	$1,085.8
Per Share	$18.69	$23.81

(1) Fully diluted shares outstanding equivalent is 45.6 million

(2) Based on 6.0-8.0x LTM unallocated corporate expenses of $9.3 million

Table 29

Mark IV: Comparable segment valuation, power transfer and fluid handling

Dollars in millions

Company	Equity value	Total entrpirse value	*LTM margins* Gross	EBIT	EBITDA	Assets	*TEV multiple of LTM* Revenues	EBIT	EBITDA	*3-year CAGR* Revenue	EBITDA
Arvin Industries	$556.7	$1049.4	18.3%	5.5%	9.0%	0.9x	0.58x	10.5x	6.5x	4.3%	4.2%
Dana Corp	1,994.4	4,103.9	16.2	4.2	8.0	1.0	0.86	20.4	10.7	(5.6)	(26.3)
Echlin	1,121.1	1,043.9	27.4	5.4	8.7	1.1	0.81	14.9	9.3	7.7	9.8
Federal-Mogul	369.5	958.7	19.1	3.9	7.7	0.9	0.66	14.2	7.8	7.2	(14.2)
SPX Industries	278.7	571.8	31.4	3.9	7.3	0.9	0.78	20.0	10.8	3.2	(18.9)
Simpson Industries	167.3	178.0	11.2	7.3	13.4	1.1	0.83	11.3	6.2	(1.4)	(9.0)
Standrd Motor Prod.	154.2	317.5	35.3	3.4	5.2	0.8	0.60	17.3	11.4	11.7	(10.6)
TRW Automotive Grp. Acquisition by FMO		213.0*	20.8	3.9	4.3	1.3	0.69	17.9	15.9		
Mark IV Segment Data				*10.3%*	*12.7%*					*19.8%*	*25.0%*
Mean			22.5%	5.3%	8.5%	1.0x	0.73x	15.8x	9.8x	5.2%	(4.4%)
Implied Range						*.8-1.1x*	*.6-.8x*	*10-14x*	*6-9x*		

Table 30

Mark IV: Comparable segment valuation, mass transit and traffic control

Dollars in millions

Company	Equity value	Total entrpirse value	*LTM margins(1)* Gross	EBIT	EBITDA	Assets	*TEV(2) multiple of LTM* Revenues	EBIT	EBITDA	*3-year CAGR* Revenue	EBITDA
BE Aerospace	$122.2	$183.5	29.8%	8.4%	12.9%	1.0x	0.97x	8.0x	5.9x	NM	NM
Federal Signal	695.0	803.6	31.9	10.8	12.5	2.2	1.64	15.2	13.2	8.3%	9.3%
Bombardier (Canadian $'s)	1,783.6	3069.4	6.6	5.2	7.8	0.9	0.85	16.3	10.9	20.9	40.0
Mark IV Segment Data				*14.5%*	*17.2%*					*44.8%*	*50.6%*
Implied Range						*9-1.5x*	*9-1.3x*	*13-16x*	*10-13x*		

(1) Latest twelve months margin.

(2) Total enterprise value

Table 31

Mark IV: Comparable segment valuation, professional audio

Dollars in millions

Company	Equity value	Total entrpirse value	*LTM margins* Gross	EBIT	EBITDA	Assets	*TEV multiple of LTM* Revenues	EBIT	EBITDA	*3-year CAGR* Revenue	EBITDA
Boston Acoustics	$71.6	$68.6	44.5%	22.3%	24.4%	2.6x	2.13x	9.6x	8.7	11.0%	16.1%
Carver Corp.	7.8	9.0	30.0	1.8	2.9	0.4	0.33	18.5	11.2	8.3	NM
Harman International	121.4	404.4	27.2	4.6	8.4	1.0	0.67	14.7	7.9	5.8	(35.4)
International Jensen	54.2	57.1	30.1	6.8	7.5	0.8	0.35	5.2	4.7	9.9	7.4
Koss Corp.	14.9	18.8	29.2	6.1	8.9	1.4	0.72	11.8	8.1	(2.2)	14.8
Polk Audio	11.4	10.0	48.0	2.1	5.6	0.7	0.30	14.4	5.4	(0.1)	(20.0)
Mark IV Segment Data				*14.8%*	*17.2%*					*13.3%*	*3.8%*
Implied Range						*.5-1.5x*	*.4-.7x*	*8-11x*	*5-8x*		

Table 32

Mark IV: Comparable segment valuation, instrumentation and other

Dollars in millions

Company	Equity value	Total entrpirse value	*LTM margins* Gross	EBIT	EBITDA	*TEV multiple of LTM* Assets	Revenues	EBIT	EBITDA	*3-year CAGR* Revenue	EBITDA
BEI Electronics	$50.4	$65.3	33.2%	7.1%	10.2%	0.7x	0.44x	6.3x	4.4	41.5%	8.5%
General Signal	1,097.8	1,489.5	35.8	6.6	9.6	1.2	0.81	12.3	8.5	2.2	(7.8)
K-Tron Int'l	39.3	97.8	44.3	8.8	13.5	0.8	1.08	12.2	7.9	19.0	16.6
Moore Products	35.4	33.9	50.2	NM	4.0	0.5	0.33	NM	8.3	(3.6)	(35.5)
Odetics	23.9	52.0	32.2	4.5	8.4	0.9	0.73	16.2	8.7	12.7	(5.1)
Mark IV Segment Data				*5.8%*	*9.2%*					*(10.2%)*	*(33.3%)*
Implied Range						*.6-1.0x*	*.4-.8x*	*10-13x*	*6-9x*		

Table 33

Mark IV: Power transfer & fluid handling valuation

Dollars in millions

	Comparable LTM EBIT multiple Range		*Comparable LTM EBITDA multiple Range*		*Comparable revenue multiple Range*		*Comparable asset multiple Range*	
Segment	**Low**	**High**	**Low**	**High**	**Low**	**High**	**Low**	**High**
Power Transer & Fluid Handling	10.0x	14.0x	6.0x	9.0x	0.60x	0.80x	0.60x	0.80x
LTM Mark IV segment results	$64.88		$79.87		$627.18		$580.16	
Preliminary valuation range	$648.8	$908.3	$479.2	$718.8	$376.3	$501.7	$348.1	$464.1
Estimated Range				*$800*	- *$900*			

Table 34

Mark IV: Mass transit & traffic control valuation

Dollars in millions

	Comparable LTM EBIT multiple Range		*Comparable LTM EBITDA multiple Range*		*Comparable revenue multiple Range*		*Comparable asset multiple Range*	
Segment	**Low**	**High**	**Low**	**High**	**Low**	**High**	**Low**	**High**
Mass Transit & Traffic Control	13.0x	16.0x	10.0x	13.0x	0.90x	1.30x	0.90x	1.50x
LTM Mark IV segment results	$31.37		$37.04		$215.37		$190.00	
Preliminary valuation range	$407.8	$501.9	$370.4	$481.5	$193.8	$280.0	$171.0	$285.0
Estimated range				*$300*	*$350*			

Table 35

Mark IV: Professional audio valuation

Dollars in millions

	Comparable LTM EBIT multiple Range		*Comparable LTM EBITDA multiple Range*		*Comparable revenue multiple Range*		*Comparable asset multiple Range*	
Segment	**Low**	**High**	**Low**	**High**	**Low**	**High**	**Low**	**High**
Professional Audio	8.0x	11.0x	5.0x	8.0x	0.40x	0.70x	0.50x	1.50x
LTM segment results	$26.50		$30.72		$178.87		$159.37	
Preliminary valuation range	$212.0	$291.5	$153.6	$245.8	$71.5	$125.2	$79.7	$239.1
Estimated range				*$200*	*- $250*			

Table 36

Mark IV: Instrumentation and other valuation

Dollars in millions

	Comparable LTM EBIT multiple Range		*Comparable LTM EBITDA multiple Range*		*Comparable revenue multiple Range*		*Comparable asset multiple Range*	
Segment	**Low**	**High**	**Low**	**High**	**Low**	**High**	**Low**	**High**
Instrumentation and Other	10.0x	13.0x	6.0x	9.0x	0.40x	0.80x	0.60x	1.00x
LTM segment results	$7.17		$11.45		$124.15		$89.50	
Preliminary valuation range	$71.7	$93.2	$68.7	$103.1	$49.7	$99.3	$53.7	$89.5
Estimated Range				*$85*	*- $100*			

Additional information is available upon request.

Prices of companies mentioned as of 12/21/92:
Ahmanson[1] (HF) & Co AHM $16 3/8
Allied Signal ALD $59 3/4
American Home Products[1] AHP $73 1/4
AMR Corp[3] AMR $63 3/4
Andrew Corp[2] ANDW $46
Anheuser Busch BUD $59 3/8
Arvin Industries ARV $30 1/4
AT&T[1] T $50 1/8
Ball Corp BLL $33 5/8
Bangor Hydro-Electric BGR $20 1/8
Baxter Int'l. BAX $34 1/8
BE Aerospace[4,5] BEAV $12
BEI Electronics BEII $7 3/4
BellSouth Corp BLS $52 7/8
Berkshire Hathaway BRK 11,500
Boeing[1,3] BA $36 7/8
Bombardier Inc. BBD.B $13 (Canadian)
Bristol Myers-Squibb[1] BMY $72 1/4
British Petroleum BP $43 3/8
Burlington Northern BNI $42 5/16
Central Maine Power CTP $22 7/8
Champion International[1] CHA $29 1/2
Chrysler[1] C $32 1/8
Citicorp[1] CCI $20 1/8
ClothesTime Inc[2] CTME $11 1/8
Colgate Palmolive CL $57 1/4
Dana Corp.[4] DCN $47 1/8
Delta[3] DAL $50 7/8
Dow Chemical[1] DOW $58 1/4
DuPont[1] DD $49 7/8
Eastman Kodak EK $40 7/8
Echlin Inc.[1] ECH $23 1/8
Eli Lilly LLY $64 3/8
Emerson Electric EMR $54 3/8
Exxon[1] XON $62 7/8
Fannie Mae[3] FNM $75 3/8
Federal-Mogul[1,3] FMO $16 1/2
Federal Signal FSS $20 5/8
Fisher Price[1,2] FPP $24 3/8
Ford[1] F $41
Freddie Mac[3] FRE $47
General Dynamics GD $104 5/8
General Electric[1] GE $87 1/2
General Motors[1,3] GM $33 1/8
General Signal GSX $58 7/8
Gerber GEB $20 7/8
Glaxo Holdings[1] GLX $24 1/8
Goodyear GT $64 1/4
Great Western Financial GWF $15
Harman International KTII $13 1/2
Heinz[1] HNZ $44 5/8
Honeywell HON $34 1/8
Household Int'l[3] HI $59 1/2
Imperial Chemical Ind ICI $64 3/4
Int'l Bus Machines IBM $48 7/8
Johnson & Johnson[1] JNJ $53 3/8
K-Tron International HAR $13 1/2
Mark IV Industries[2] IV $16 5/8
McDonnell Douglas[3] MD $48 1/8
Medical Care Int'l MRX $25 5/8
Merck MRK $47 1/2
Microsoft Corp [2] MSFT $90 1/2
Moore Products MORP $18 1/2
Monsanto[1] MTC $56 1/2
Motorola MOT $103 1/4
Northeast Utilities NU $26 1/4
Odetics, Inc. O.A $6 1/8
Paramount PCI $46 1/8
PepsiCo[1] PEP $42 5/8
Pfizer[1] PFE $78 5/8
Philadelphia Electric[3] PE $26 1/8
Polk Audio POLK $7 1/2
Procter & Gamble PG $54 1/4
Quaker Oats[1] OAT $66 1/4
Ralston Purina[1] RAL $49 1/4
Reynolds Metals RLM $53 7/8
RJR Nabisco[1,2] RN $8 5/8
Rockwell Int'l ROK $28 5/8
Salomon Bros SB $37
Santa Fe Pacific SFX $13 1/4
Sara Lee[1] SLE $64
Schering-Plough SGP $68 7/8
Simpson Industries[2,5] SMPS $15
SmithKline SBH $40 1/4
SPX Corp. SPW $17 3/8
Standard Motor Prod.[3] SMP $12 3/4
Staples Inc[2,3] SPLS $36 1/4
Syntex[1] SYGN $62 7/8
Tandy Corp TAN $30 1/8
Telecommunications Inc[2,3] TCOMA $21 1/8
Textron[1] TXT $42 7/8
Time Warner[1] TWX $29 3/8
TRW TRW $59
Union Carbide UK $16 3/4
Union Pacific UNP $59 1/4
United Illuminating UIL $41 1/2
United Technologies UTX $47 5/8
Upjohn UPJ $32 7/8
US Air U $11 3/4
Varian VAR $42
Wal-Mart[1] WMT $63 7/8
Warner Lambert[1] WLA $71 7/8
Watkins Johnson WJ $13 7/8
Westinghouse[1] WX $13
Weyerhaeuser Co. WY $38
Wrigley WWY $34 1/4

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