

Strategic Action

Takeovers take center stage as market leaders in '94

Highlights

■ Disinflation and anemic revenue growth will force many corporations to take strategic actions to maintain earnings growth, including:

Destructuring—dissassembling and restructuring corporations;

Plain old *cost-cutting*;

Mergers—either making acquisitions, or simply being acquired.

■ In 1994, as in 1993, the market will be led by companies that take effective strategic actions. A strategic action that will be of rising importance in 1994—*mergers and acquisitions*—is becoming more numerous for four reasons:

Pent-up demand after a three-year hiatus;

Declining interest rates, expanding economy are *increasing confidence* of CEOs and their bankers;

Rapid strategic changes in such sectors as health care, entertainment and telecommunications;

Currency of acquisitions has become more valuable as *P/Es of many firms have risen, while P/Es of others remain low*.

■ Three types of acquisitions:

Industry consolidation. Firms can get top-line growth with limited risk by acquiring a firm, cutting overhead, consolidating operations. Will be common in fragmented industries such as banking, supermarkets, food, pollution control.

Buy a nickel for four cents. Firms such as Inco and a number of E&P companies are selling below replacement value.

Strategic acquisitions, such as TCOMA / Bell Atlantic. One possibility here: A major insurer buying a large HMO such as United Healthcare.

■ We highlight 47 companies likely to take strategic action—see pages 9–13.

Candidates for Strategic Action

Company name	Symbol	PW rating	Strategic action
Advanced Magnetics	AVM	Buy	Acquisition candidate
ALC Communications	ALC	Buy	Acquisition candidate
Andover Bancorp	ANDB	Attractive	Acquisition candidate
BayBanks Inc	BBNK	Buy	Acquisition candidate
Biomagnetic Technologies	BTIX	Attractive	Acquisition candidate
Blockbuster Entertainment	BV	Attractive	Potential acquiror
Calif Fed Savings	CAL	Attractive	Acquisition candidate
Disney (Walt)	DIS	Buy	Acquisition candidate
Dr Pepper/Seven-Up	DPS	Buy	Acquisition candidate
Donaldson Co	DCI	Neutral	Acquisition candidate
Elf Aquitaine	ELF	Buy	Destructuring & cost-cutting
Farrel Corp	FARL	Neutral	Acquisition candidate
First American Corp	FATN	Attractive	Acquisition candidate
Gerber Products	GEB	Neutral	Acquisition candidate
Giant Food	GFS	Not rated*	Acquisition candidate
Harnischfeger	HPH	Neutral	Acquisition candidate
Helene Curtis	HC	Neutral	Acquisition candidate
ICO Inc	ICOC	Buy	Acquisition candidate
Inco Ltd	N	Buy	Acquisition candidate
Indresco Inc	ID	Neutral	Acquisition candidate
i-STAT Corp	STAT	Neutral	Acquisition candidate
LDDS Communications	LDDS	Buy	Acquisition candidate
Litton Industries	LIT	Neutral	Acquisition candidate
Moorco International	MRC	Neutral	Acquisition candidate
Maryland Federal	MFSL	Attractive	Acquisition candidate
Medford Savings Bank	MDBK	Attractive	Acquisition candidate
Midlantic Corp	MIDL	Neutral	Acquisition candidate
Monsanto Co	MTC	Buy	Destructuring & cost-cutting
Musicland Stores	MLG	Buy	Potential acquiror
Natl Medical Entr	NME	Attractive	Destructuring & cost-cutting
NEXTEL Communications	CALL	Neutral	Acquisition candidate
Paco Pharm Services	PACO	Attractive	Acquisition candidate
Pet Inc	PT	Neutral	Acquisition candidate
Price/Costco Inc	PCCW	Attractive	Cost-cutting
Procter & Gamble	PG	Attractive	Cost-cutting & acquiror
Sealright Co	SRCO	Neutral	Acquisition candidate
Shawmut National	SNC	Buy	Acquisition candidate
Super Food Service	SFS	Neutral	Acquisition candidate
Tetra Technologies	TTRA	Attractive	Acquisition candidate
Tide West Oil	TIDE	Attractive	Acquisition candidate
United Healthcare	UNH	Attractive	Acquisition candidate
United Waste	UWST	Buy	Acquisition candidate
Vodafone Group	VOD	Attractive	Acquisition candidate
Varian Associates	VAR	Attractive	Destructuring
Warner-Lambert	WLA	Buy	Cost-cutting
Weis Markets	WMK	Not rated*	Acquisition candidate
Xerox	XRX	Attractive	Destructuring & cost-cutting

* Included in this list are companies (designated "not rated" in the table) that are followed by our analysts as part of their industry research. PaineWebber has limited its analysis of these companies to the specific topic addressed in this report and, as is the case with all unrated securities, recommends neither purchase nor sale.

For investors and corporate managers alike, the dominant reality of the 1990s is continued disinflation, which has spread from the factory and the oil patch to the supermarket and the hospital, not to mention the tobacco shop. Faced with the reality of minimal top-line growth, managements have focused on cutting costs and destructuring—disassembling and restructuring—their companies in order to raise profits. Corporations that do this successfully can be superb stocks. Indeed, *this year, leadership of the DJIA has been delineated not by classic market sectors such as "growth" or "cyclical" but by destructuring stories* such as General Motors, Eastman Kodak, Goodyear Tire and Sears (Chart 1). The list of 18 destructuring plays that PaineWebber published a year ago in a major report (see *Destructuring—How less is more in the late 1990s*,

January 1, 1993) have outperformed the S&P 500 by more than 1,000 basis points—up 16.67%, versus up 5.98% for the S&P 500 (through November 30, 1993).

American industry's initial reaction to the disinflation and slow economic growth of the 1980s was to close unprofitable plants, producing a decade of record write-offs for the S&P 500, that so far have totaled over \$22—or the equivalent of about one full year's worth of earnings (Chart 2).

Then, after the physical plants were pared back, American industry cut workers. Fewer workers producing more revenues meant higher profits. By the end of November 1993 the average work week had reached 41.7 hours—a post-war high (Chart 3).

Chart 1
1993 DJIA performance
Year to date through November 30

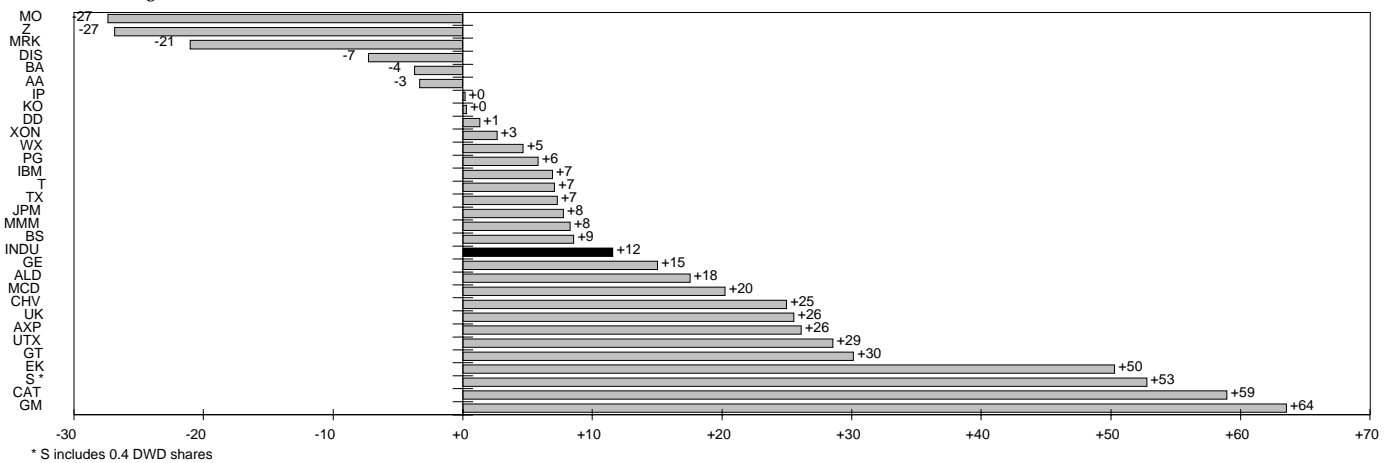


Chart 2
S&P 500 operating EPS

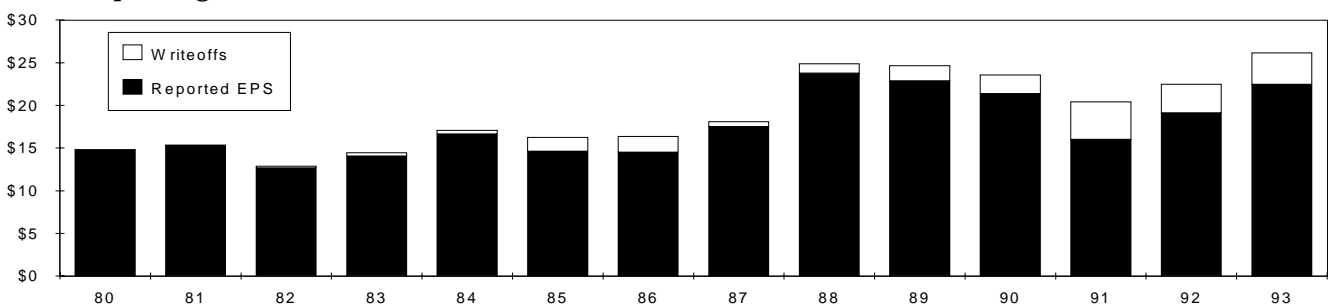


Chart 3
Factory workweek—Hours

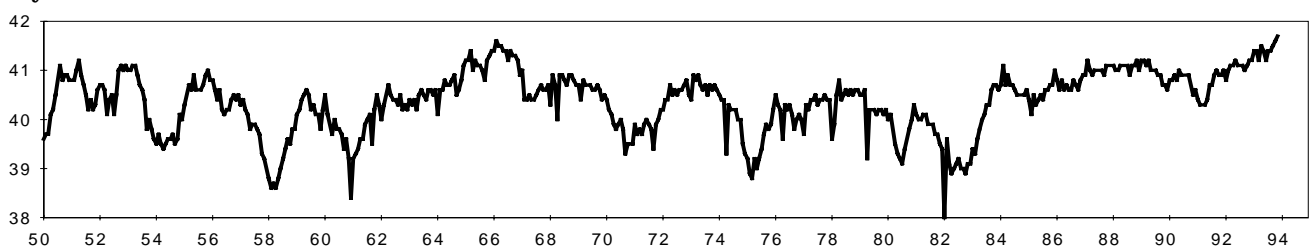


Chart 4
Capacity utilization



Chart 5
Imports
As a percentage of total goods output

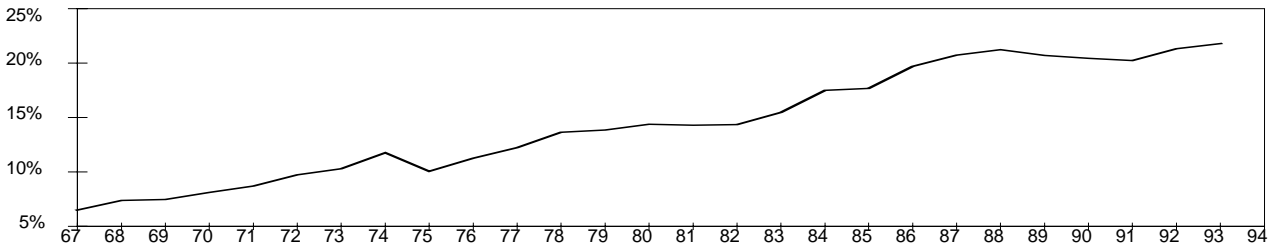


Chart 6
S&P Industrials sales growth
Year-to-year change, rolling four-quarter totals

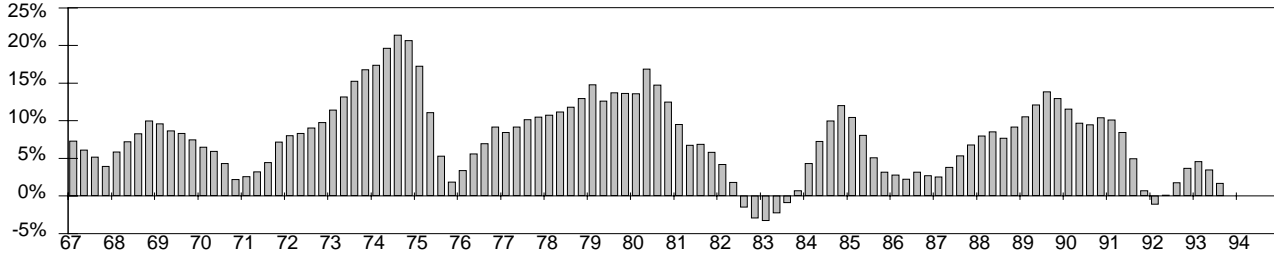


Chart 7
Employment growth in six economic expansions
Percent change in employment in first 31 months of expansion beginning . . .

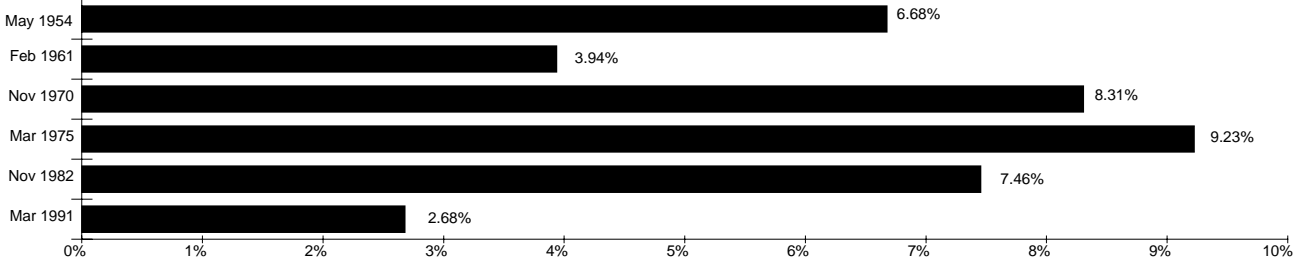
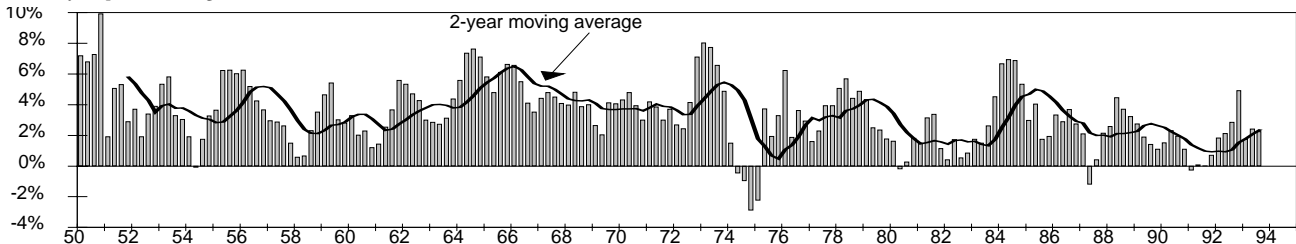


Chart 8
Real disposable income
Year-to-year percent change



Corporate America's search for earnings growth will continue to focus on destructuring. But, those companies that have already cut costs to the limit, may now turn to growing the top line again. However, in an environment that continues to be marked by low inflation and very low real growth, top line growth still is not achieved by merely adding new capacity where ample capacity still exists domestically and globally (Chart 4). Excess global capacity limits corporate pricing power in the U.S., because of the large (and growing) share of imports in the U.S. economy (Chart 5).

Consequently, in its search for top line growth, corporate America will increasingly turn to strategic acquisitions—takeovers. The benefit will not only be to revenues, but will be amplified at the bottom line, as economies of scale and synergies enable cost-cutting at the acquired firm. To be sure, destructuring and cost-cutting will continue to be done by companies that either made it through the 1980s without having to take such action (such as the drug stocks), or were simply late to get the message (such as Xerox). But takeovers will now take center stage in corporate America's search for growth.

Disinflation and destructuring

There is no more relevant measure of disinflation's impact on corporations than the sales of the S&P Industrials. The peak rate of gain in S&P Industrials sales in the last two years has been just 5.0%—even though comparisons were extremely easy, after a slight decline in sales during the recession itself (Chart 6). Moreover, we have since retreated from that 5.0% sales gain; recently sales growth has only been a pitiful 1.7%. By contrast, during the economic expansion of the mid-1980s—which was also considered a time of wrenching disinflation—sales growth never got below 2.2%, and the 1984-1990 average was 7.6%.

Although the results of destructuring are most dramatic when a large, mediocre company gets serious about improving returns to shareholders, the payoff from cost-cutting and destructuring is fairly pervasive among large corporations. Despite weak top-line growth, S&P Industrials operating earnings will be up about 11% in 1993, the second double-digit gain in a row. In fact, of 93 major companies in the S&P 500, no less than 15 generated growth in net income of more than 15% in the first three quarters of 1993 *despite having sales growth of less than 5%*. Cost-cutting, which led to many positive earnings surprises by large companies in the second and third quarters, was a key reason why we became more positive on S&P earnings growth last August.

Destructuring is self-reinforcing

Though its character is changing, the destructuring phenomenon is far from over. For one thing, it is self-reinforcing. When large corporations relentlessly downsize to improve profitability, they are collectively laying off many of their best customers: Blue-collar and white-collar workers who had decent benefits and (they thought) relatively secure jobs. As we forecast a year ago, despite respectable GDP growth America has continued to suffer from a "job drought"—a trend created not only by corporate destructuring, but also by defense cutbacks, health care retrenchment and the rising regulatory burden on small business, which health care reform could exacerbate. Gains in employment so far in this economic expansion are far lower than in most previous recoveries (Chart 7). With wage growth also weak, real disposable income growth has been anemic (Chart 8). Scared and sacked workers make poor customers, so corporations' sales growth continues to be weak, which will encourage more layoffs, and so on. Although there are recent signs of an economic pickup, weak employment should continue to restrain growth.

Here is another reason why destructuring will continue: While some sectors, such as energy, basic industry and banking, have been in a destructuring mode for many years, other industries, such as pharmaceuticals, tobacco and household products, are *just now* plunging into the "big bath" of write-downs, asset sales and layoffs designed to boost profit margins in the future.

From destructuring to strategic action

Because both disinflation and destructuring will continue, the stock market will continue to be led by individual destructuring stories—not by "growth stocks," "cyclical stocks" or "value stocks." *But with this important new twist*: The pickup in takeover activity during 1993 means that the concept of destructuring has broadened out from asset sales and cost-cutting to include making a shrewd acquisition or, alternatively, getting acquired by another company. The debt-driven takeover mania of the late 1980s (which ended unceremoniously with the UAL debacle of October 1989) badly tarnished takeovers, and the M&A market was further chilled by the banking crisis of 1990-91. Then too, during the late 1980s just about every deal that *should* have been done *was* done—along with quite a few that should *never* have been done. For these reasons, M&A activity slowed down dramatically from 1990 through 1992.

This year, however, merger activity has picked up nicely (Chart 9), led by huge, strategic deals such as AT&T/McCaw; Merck/Medco Containment; Paramount/Viacom/QVC; and TeleCommunications Inc./Bell Atlantic. Several factors are driving this new burst of M&A activity.

- First, after a three-year hiatus, there is pent-up demand.
- Second, declining interest rates and an expanding economy have increased the confidence of CEOs, not to mention their bankers, who were covering in their bunkers just three years ago as commercial real estate values, the junk bond market and industrial activity all headed south at the same time.
- Third, lightning fast strategic changes in such sectors as health care, entertainment and telecommunications are encouraging managements to make deals sooner rather than later—especially since there is a lot more merchandise to choose from if you get to the counter early.
- Fourth, the currency of acquisition has become more valuable: Many of the deals that we have seen—and are likely to continue to see—have involved high P/E companies using their stock to buy other companies in all-stock transactions. The opportunities to carry out a low-P/E/high-P/E arbitrage are considerable. Over 25% of the stocks in the S&P 500 are selling at a P/E of 20x or higher, while over 20% are selling at a P/E of 13x or less (Chart 10).

In sum, what we will see in 1994 is managements continuing to grapple with weak top-line growth by engaging in three main types of strategic action:

- Destructuring—disassembling and restructuring corporations.
- Plain old cost-cutting.
- Mergers—either making (hopefully) intelligent mergers or simply being acquired.

Obviously, managements are not limited to just one of these actions; many will do all three at the same time. For example, in the past couple of years Procter & Gamble has shed less profitable businesses, shifted to everyday low pricing, taken aggressive cost-cutting steps and made acquisitions and other deals to expand its overseas business. We think the corporations that take the correct strategic action will lead the stock market in 1994, just as they did in 1993. Accordingly, the Strategy Group went to PaineWebber's industry analysts and asked them which companies in their industry were most likely to benefit from strategic action over the next two-to-three years—either because the company initiated such action or received a takeover bid. The main conclusions are summarized beginning on page 9.

Patterns of strategic action: A taxonomy for investors

The process of consulting with dozens of analysts covering scores of interlocking industry groups generated an intriguing and instructive bottom-up view of the variety of strategic action that we can expect to see in coming years.

Chart 9

Dollar value of mergers & acquisitions

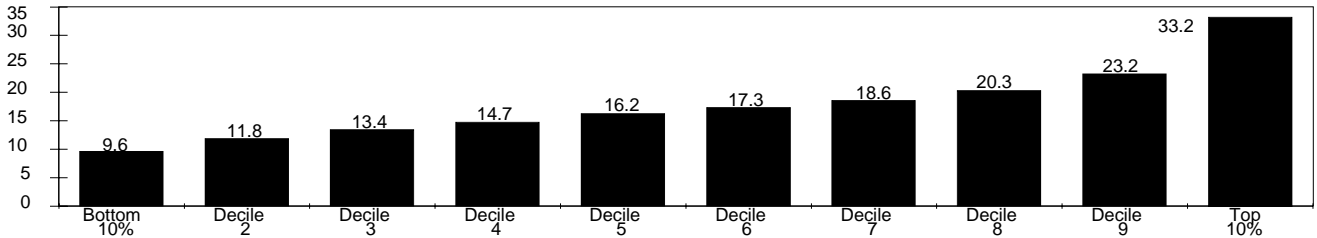
as a percent of total stock market value



Chart 10

Average P/E of stocks in the S&P 500 by decile

P/Es based on IBES mean estimates for 1993 EPS



What emerges is a sort of strategic taxonomy, showing the major actions that can be taken to prosper during the disinflationary 1990s. Here are the basic categories:

Destructuring

In some corporations, the individual parts are worth more than the whole. The stock market value of a highly diversified company may be depressed because it is difficult for analysts to understand, and at least one part of the company always seems to have a problem. The classic example is Varian. Fully 58% of 1994 pre-tax income will be produced by its highly profitable health care division, but the strength of the division is poorly appreciated on Wall Street because Varian is mainly covered by semiconductor analysts—even though semiconductor equipment will account for only 6% of 1994 income and 24% of sales. Because of distortions like this, the break-up value of Varian is about 40% higher than its stock market value. This value gap could be closed by simply splitting the company apart.

In other companies the payoff from destructuring comes from exiting unprofitable parts of the firm. At Monsanto, the G.D. Searle pharmaceutical division has been a poor performer for years, and if it cannot be turned around it could well be sold. At National Medical Enterprises, the value of the firm could be raised at least 25% by shedding unprofitable hospitals and using the proceeds to pay down debt. Elf Aquitaine could also improve profitability by selling peripheral divisions: The synergies between oil refining and the Yves St. Laurent perfume business it bought a couple of years ago are not exactly self-evident.

Cost-cutting

Corporations can get a huge amount of mileage by getting serious about cutting costs and finding new and cheaper ways to do things. Large mediocre corporations that suddenly do this can become excellent stocks. Cost-cutting is not the same as destructuring; you can reduce headcount, renegotiate contracts and move out of a fancy headquarters without selling divisions. But as a practical matter,

destructuring and cost-cutting tend to go together because both require a shift in management philosophy toward a single-minded focus on profitability, as well as willingness to make tough and unpopular decisions. To boost profitability at Monsanto, the new chief operating officer would consider divesting G.D. Searle for the same reason he is willing to cut back on R&D—impatience with Monsanto's traditional penchant for expensive "blue sky" research that seldom produced a big payoff. Another reason why cost-cutting and destructuring go together is that firms attempt to raise the profitability of divisions before selling them. Varian has already cut headcount dramatically, which should improve the price of the four divisions when and if they are sold.

Acquisitions***Industry consolidation***

Acquisitions are of several different types, of which the most straightforward and common is industry consolidation. America does not need 11,000 FDIC-insured banks, 200 public biotech companies, or dozens of small supermarket chains and waste management companies. Although there are undeniable virtues to small firms—particularly an entrepreneurial spirit and fast corporate reflexes—industry fragmentation leads to much redundancy. Each company must have its own headquarters, its own top management, its own annual report and (depending on the industry) its own distribution network, sales force, garbage collection routes, etc. In addition to lacking economies of scale, small firms do not have much clout with suppliers, distributors, retailers, bottlers, etc. So profitability can be improved when small firms are integrated into a larger organization.

Conversely, large firms are eager to make acquisitions. They provide a source of top-line growth in a disinflationary, slow-growth economy. It is often much faster and less risky to *buy* new capacity than to *build* it, whether one is talking about new consumer brands, supermarkets or medical technology. Furthermore, valuations are quite reasonable in some out-of-favor parts of the market, and

large buyers can afford to pay a premium to stock market valuations because of the economies they can achieve after absorbing the smaller firm. Consequently, we will see consolidating mergers in many different industries including:

- Banking, where the goldfish are eating the guppies and the piranha are eating the goldfish.
- Food, where large firms might want to acquire Gerber and Pet, relatively small firms that have leading brands.
- Health care, where large firms with plenty of cash and global distribution systems may buy small firms with proprietary products and relatively depressed stock prices.
- Machinery, where most major firms are looking to make acquisitions.
- Pollution control, where there are powerful synergies because collection routes can be combined and the utilization of dumps increased.
- Supermarkets, where building new stores in a new market is far more risky than buying a regional chain.

Arguably, the best way for investors to play this theme is the “icing on the cake” strategy — by purchasing the shares of companies that are good investments in their own right where takeover potential is merely icing on the cake. This applies to three mid-sized banks that have solid regional franchises (BayBanks, First American and Shawmut) and also to three fast-growing, strategically positioned telecommunications firms (ALC Communications, LDDS, and Vodafone). Of course, it is much more risky to buy stocks that have already traded up because they are “takeover candidates”—particularly when the market’s logic is suspect. Such is the case for generic drug companies; investors apparently expect them to be snatched up by the major pharmaceutical houses, but large drug companies are more likely to create their own generic drug divisions.

Buy a nickel for four cents

These were common deals in the 1980s when market P/Es were lower and the replacement value of the stock market was much higher than the market value. Nevertheless, they will still occur. In fact, we saw one a few months ago when Hanson Trust, the big British conglomerate, purchased Quantum Chemical, a producer of polyethylene whose stock price was depressed, along with the price of the commodity. Even after paying a takeover premium,

Hanson was able to buy Quantum's assets for much less than it would cost to build them—and, it hopes, much

less than they will be worth when petrochemical prices rebound. The situation is similar for Inco, the big nickel producer whose shares are trading around \$26 but whose replacement value is \$34. You can also buy a nickel for four cents in the oil patch; major E&P companies are selling at only 73% of their commodity-based break-up value. The recent sell-off in these stocks has merely made the valuations more compelling.

Strategic acquisitions

These are the deals that make your lower jaw drop down and hit the keyboard of your Quotron machine—deals like Merck/Medco and TCOMA/Bell Atlantic, which link companies or even industries in unexpected ways. Their genesis is the moment a CEO says to himself, “The world is changing. I better make a major move fast, or my company is going to be in trouble.” By their nature, such deals are fairly rare, but they are highly important because they can change the way investors value all the stocks in an industry—witness the way RBOC and cable TV stocks traded up after the TCOMA/Bell Atlantic deal was announced. Two strategic possibilities discussed in this report would be a large insurance company (such as Prudential or Aetna) buying a big HMO (such as United Health) and a non-telecommunications firm (such as a large computer company) buying a major stake in NEXTEL to help it rapidly sign up customers.

Strategic Action—Industry summary

Banking

Consolidation will continue because 1) many large banks have a high stock price and confident management, which facilitate deals; 2) consolidation can cut costs because as a small bank is folded into a branch system, overhead is eliminated; 3) smaller banks are under pressure to sell out because they are losing market share. Eight acquisition candidates: **Andover Bancorp, BayBanks, CalFed, First American, Maryland Federal, Medford Savings, Midlantic, Shawmut.**

Page 14

Beverages

Cadbury Schweppes may buy the 74% of **Dr Pepper/Seven-Up** that it does not already own. Cadbury's own brands (Schweppes, Canada Dry, etc.) have a 3.4% share of the U.S. soft drink market and A&W (which Cadbury bought in 1993) has 2.2%. Adding these to Dr Pepper's 11.5%, Cadbury would have a hefty 17.1% share of the U.S. market, all in the high-growth non-cola sector. Though Cadbury's ambitions are no secret, the fact is that it would have to pay \$27 to \$29 to acquire DPS, well above the stock's current price.

Page 17

Chemicals

Historically **Monsanto** has been a mediocre stock, even though two products—NutraSweet and Roundup—generated plenty of cash used to repurchase shares aggressively. The company tried to grow revenues with blue-sky R&D projects that seldom paid off. A new chief operating officer will focus on cutting costs and shedding underperforming assets. If the profitability of Searle, the pharmaceutical division, does not improve it may be sold. Some product lines in basic chemicals will probably be sold. There are huge opportunities to boost the net margin by cutting SG&A and R&D. These efforts should sustain 20% earnings growth over the next three years.

Page 18

Energy: Exploration and production

Acquisitions of upstream assets by E&P firms have generally been additive to earnings, cash flow and asset values. Many of these acquisitions have been individual properties of major oil firms. As prices of such properties rise, we will see more acquisitions of entire companies, which offer good value because they are trading at just 73% of commodity-based break-up value. There is no dearth of capital for deals; the aggregate "acquisition firepower"—i.e., funds potentially available for acquisitions—of 25 firms is \$17.7 billion. Three small companies that are particularly logical acquisitions are **ICO** and **Tetra Technologies** (two niche oil service firms) and **Tide West Oil Co.**, an E&P company.

Page 19

Energy: Oil

The 9th largest oil company in the world, **Elf Aquitaine** is 51% owned by the French government, which plans to sell part of the firm to private investors. To insure that the privatization is successful, Elf ought to destructure. Partly because of unwise acquisitions, between 1989 and 1992 Elf's return on capital employed dropped from 12.1% to 3.6%; it is now the lowest in the industry. Costs are too high, with profit per employee 2nd lowest among 15 major oil companies. Elf *should* destructure, but *will* it? Two positive signs (based on the pattern at other oil companies): Elf has hired a new CEO and lowered its long-term oil price forecast. If it destructures, stock price could double in two years.

Page 23

Entertainment

In the entertainment world, we are seeing a consolidation of content manufacturers, electronic distribution systems and marketers. Over the next decade, this process will go global. The big winners will be the major entertainment brands, particularly **Disney**. Paramount will probably be acquired at a cash flow multiple 50% higher than the acquisitions of Columbia/TriStar and Universal. If Disney were acquired at a similar multiple, it could be sold at \$57 per share.

Page 25

Food

It is risky and expensive to try to establish a new brand or even to expand the market share of a secondary brand, because the market leaders can counterattack by cutting price and wiping out your profits. It makes more sense to buy companies with major brands. Now is a good time to do so, while Wall Street is still spooked by Marlboro Friday and valuations are low. Two logical acquisitions: **Gerber Products**, which has 71% of the U.S. baby food market, and **Pet Inc.**, which has the number one brand in the fast-growing Mexican food category (Old El Paso) and number two in ready-to-eat soup (Progresso). Buyers could achieve cost savings by cutting overhead and folding these products into established distribution channels.

Page 25

Health care: Biotechnology

In mid-1993 about 60 of the 200 public biotech firms were at risk of running out of cash within two years, and business risks have increased for all firms as disinflation hits health care. Nevertheless, firms have been able to raise new capital to keep going; a sudden shrinkage in the number of public companies is not likely. Good way to play biotech consolidation: Buy a basket of companies that have good scientific promise but will require additional funds within two years. Such firms are most likely to make a move that benefits shareholders. Aside from trying to stay independent, firms have four strategic options: Sell partial ownership to a large firm (worked well when Hoffmann-La Roche bought part of Genentech); product-related deals (e.g., sell the right to commercialize a product outside U.S.); sell entire company (risky because you get swallowed by a corporate behemoth); merger of equals (bad deal for stockholders).

Page 27

Health care: HMOs

Whether or not the Clinton reform plan becomes law, the U.S. will move toward managed care because it is cheaper than "fee for service." A shrewd strategic move for a large indemnity health insurance company, such as Prudential or Aetna, would be to buy a major HMO. Although big insurers have managed care businesses, few have critical mass, and time is running short: One-third of the urban commercial insurance market is now in HMOs. Best HMO to acquire: **United Healthcare**, which has 2 million members in managed care, provides services to over 20 million Americans.

Page 30

Health care: Hospital management

Share price of **National Medical Enterprises** is down from 1991 high of \$26 to \$13-14, while EPS fell by a third, mainly because of law suits and federal probe of its psychiatric unit. By cutting costs and shedding assets, new management could lift share price to \$15-16. NME is selling most of its rehab hospitals, nearly all its psych hospitals as well as other assets; the remaining general hospital group could also see some asset sales or purchases. This plus cash flow should generate \$500 million, to be used to pay down debt. With sales down from \$3.7 billion to \$2.7 billion, a leaner NME consisting mainly of general hospitals and a few rehab units could have EPS of \$1.20 in FY 1995.

Page 31

Health care: Medical technology

As health care goes through the disinflationary wringer, large health care firms such as Abbott, Baxter and Johnson & Johnson must rely more on proprietary new products for growth. These are risky and time-consuming to develop in house. Solution: Acquire small med-tech firms with promising new products. Three candidates: **Advanced Magnetics, Biomagnetic Technologies, i-STAT**. Large firms have the cash to make the acquisitions and the global sales forces to sell their products.

*Page 33**Health care: Pharmaceuticals*

Warner-Lambert has made two shrewd strategic moves. Going with its strength in the OTC drug business, it formed a joint venture with Burroughs Wellcome to pool the OTC drugs. The JV starts with sales of \$1.6 billion, but will grow rapidly in next few years as it adds Zovirax, eighth largest selling prescription drug in the world, and Glaxo's Zantac, the largest seller in the world. Well before it was fashionable in drug industry, WLA took a major write-off to rationalize manufacturing facilities, and it recently took a second write-off. Despite loss of Lopid, WLA's ethical drug business will do better than expected, thanks to Cognex and other promising drugs.

*Page 36**Health care: Pharmaceuticals—Generic*

In the age of managed care and big, price-sensitive buyers, it makes sense for large drug companies to buy generic drug companies. Right? Wrong—especially when they are selling at 40-100 times earnings. A drug company would not get much by making such an acquisition, because most generic companies make products that are easily copied by competitors. And now that they are downsizing, large drug firms have ample resources—financial, scientific, manufacturing, distribution, technical—to establish their own generic operations, which will probably have more credibility in the market place anyway. So investors who have bid up generic “takeover candidates” are likely to get burned. Stocks at risk include Barr Labs, Biocraft, Marsam, Pharmaceutical Resources, Purepac, Watson and Zenith.

*Page 37**Household products*

Procter & Gamble is carrying out a far-sighted strategy that seems well suited to the 1990s: Using an everyday low pricing strategy, in place of the high/low pricing policy that allowed supermarket chains to buy huge quantities of a product while it was “on deal” and then sell some of it to diverters. Though not without risk because retailers prefer the current system, EDLP should ultimately expand margins and market share by lowering manufacturing and distribution costs while giving consumers what they want—national brands at a competitive price. An integral part of EDLP is to slash costs and shed less attractive businesses, which P&G is doing aggressively.

*Page 39**Machinery*

Investors have high profit expectations for this sector, where stock prices are up 70% on average in past three years. But global demand for capital goods is still underwhelming. Therefore, managements of most companies are looking to grow via acquisitions, whether of whole companies or of divisions. The problem: Stocks are not cheap, especially with some divisions being floated in the IPO market. Six companies that could be acquired: **Donaldson, Farrel, Harnischfeger, Indresco, Litton, Moorco**.

Page 40

Metals—Non-ferrous

Inco, which has 25% of the world nickel market, resembles Quantum Chemical before it was bought by Hanson Trust. The stock price is depressed because the commodity price is depressed, so a strategic buyer interested in its replacement value and *long-term* economic value could get a bargain. Inco's replacement value, net of debt, is \$34 per share, but the shares are trading around \$26. Large metals companies such as RTZ and British Steel might be interested because Inco's assets (notably its nickel reserves and environmentally unfriendly smelters) would be extraordinarily difficult to build from the ground up. *Page 43*

Multi-industry

One stock that gets a conglomerate discount because it is in four apparently disparate businesses is **Varian**. Its break-up value is 40% higher than its current stock market value. Over the next two years, management will focus on boosting margins, fixing the barely profitable semi-conductor division and repurchasing shares. If the gap between Varian's stock market value and private market value persists, it will take steps to close the gap, possibly by selling the four divisions individually. *Page 44*

Xerox's financial performance has been poor for more than a decade; EPS in 1993 will be 32% below the 1980 peak. But XRX has finally decided to shift course. Financial services will probably be sold, with proceeds used to pay down debt. XRX has announced a \$700 million aftertax charge to cover a major cost-cutting program. XRX will reduce headcount in its document processing division by more than 10,000 (or 10%), close inefficient facilities, and generally simplify and streamline the firm. This cost-cutting could reduce SG&A as a percent of sales from 32% in 1993 to 28% in 1995, causing EPS to rise from \$5.17 in 1993 to \$8.70 in 1995 despite annual revenue growth of only 2-3%. *Page 46*

Packaging

Revenue growth will be slow in this industry in the '90s, so companies are trying to grow through acquisitions. Buyers can achieve some economies by cutting overhead, merging sales forces, vertically integrating manufacturing operations (e.g., use your own linerboard to produce food containers). Two prime candidates: **Paco, Sealright**. *Page 47*

Personal care products

A firm intent on expanding in the U.S. personal care market might acquire **Helene Curtis**, a family-controlled cosmetics company with \$1.2 billion in sales. It has strong brands (Suave, Salon Selectives, Finesse) in the fragmented hair care market, but its margins are low because of a high cost structure. A larger firm would be better positioned to fight industry leader Procter & Gamble. HC shares traded down in 1993 because its new Vibrance line has fared poorly. *Page 48*

Pollution control

Mergers are common in this industry and will continue because: 1) Small operators and municipalities cannot afford to meet new regulations, particularly Subtitle D regulations for dumps; 2) the industry is out of favor on Wall Street, so stocks are cheap; 3) mergers produce major synergies as overhead is cut, collection routes are consolidated, dumps become more profitable as volumes increase. Prime candidate for acquisition: **United Waste**, a small, profitable company with operations in Michigan, Massachusetts, Pennsylvania. *Page 49*

Retailing—Music

In contrast to most segments of U.S. retailing, consumers of music receive poor service and narrow selection. Forty percent walk out of the store without buying anything. Two companies taking advantage of this are **Blockbuster** and **MusicLand**, which are emphasizing freestanding megastores. Their expansion may entail acquisition or demise of such firms as Spec's, Transworld, Live Entertainment, National Record Mart. For BV, this is part of a broader strategy of becoming a multi-media neighborhood entertainment source providing videos, CD ROMs, music and entertainment centers. *Page 51*

Retailing—Supermarkets

Growth is tough to achieve in era of low food inflation, tight-fisted consumers. Recent mishaps of Food Lion in Texas and Smith's Food & Drug in Phoenix show dangers of exporting a format to a new region. It is much less risky to acquire well-established regional chains. Two possibilities, both run by elderly founders: **Giant Food** in D.C. area, which has good locations, 50% market share, but strong unions; **Weis Markets** in Pennsylvania, which has very high margins. Another company that may sell out is **Super Food**, a wholesale food distributor whose growth prospects have faded. *Page 53*

Retailing—Warehouse clubs

The industry is consolidating as Wal-Mart's Sam's Wholesale Clubs buys most of K mart's Pace (with the rest being closed) and Price Company merges with Costco. This is good for both Sam's and **Price/Costco** because it curbs competition, and the second entrant in any region tends to do poorly. Price/Costco will do better than expected. Overhead costs will be cut, Costco management will quickly optimize merchandising in all the clubs, bring the best of both operators to all stores, and the company will expand into foreign markets, where the warehouse format has superb potential because consumers pay much higher prices than in the U.S. *Page 55*

Telecommunications

To avoid going the way of Western Union (remember telegrams?) in the fast-changing telecommunications industry, firms must make shrewd strategic acquisitions. Firms that want to get a toehold in the U.S. long distance market (either foreign firms or, if laws are changed, RBOCs) might want to acquire **ALC Communications** or **LD DS Communications**, two resellers of long-distance service that cater to the profitable small-business market. Wireless telephony is strategically well positioned because, as costs come down, it will be a viable alternative to traditional local phone service. One attractive acquisition candidate is **NEXTEL**, which will be providing wireless service to the ten largest U.S. markets. NEXTEL might also sell equity to a partner with a national marketing presence that could lower the cost of signing up wireless customers. Another candidate is **Vodafone**, which has 57% of the U.K. wireless market and access to the wireless markets of 13 other countries. *Page 57*

Banking

Consolidation of the banking industry

The U.S. banking system has been consolidating rapidly in recent years; the number of FDIC-insured banks has dropped from about 14,000 in 1986 to 11,000 in mid-1993. Which means the U.S. still has about 10,500 too many banks. There is good reason to believe that the consolidation process will continue, though at a faster pace in some states than others. Four forces are propelling consolidation:

1. Following the financial crunch of 1990, many larger banks have prospered and their stocks prices have soared. These banks have the financial strength, management confidence, and high-priced currency (i.e., their own stock) that facilitate acquisitions. As is always true in a consolidating industry, there is pressure on the buyers to buy sooner rather than later, lest competitors grab the best properties.
2. Larger banks can boost earnings by purchasing smaller banks, particularly those situated within their own territory, because they can slash overhead and gain economies of scale in an increasingly technology-intensive business. Acquisitions offer an avenue of growth in a period of weak loan demand, because a buyer can use its high-P/E stock to buy a smaller bank and then sharply reduce costs by consolidating operations, reducing headcount, outsourcing data processing functions, etc.
3. Smaller banks are under increasing pressure to sell out because, despite the recent dramatic rebound in its financial health, the banking business is still losing market share to other financial intermediaries such as brokerage firms, mutual funds complexes, residential mortgage lenders (i.e., Countrywide Credit), etc. Small banks will have a tough time trying to "go it alone," especially with the overall rate of debt creation likely to be weak in the 1990s.
4. Now is a good time for acquiring banks to do acquisitions because their stocks are trading at relatively high P/Es, which could decline for a variety of reasons including generalized weakness in stock prices or a rotation out of banks into other groups.

Three Northeastern turnaround situations with strong franchises . . .

Shawmut and Midlantic

The ongoing consolidation of the banking industry creates opportunity in banks of many sizes and shapes. Two take-over candidates with improving fundamentals that are followed by PaineWebber bank analyst Lawrence Cohn are Midlantic and Shawmut. The stories are similar. Both are mid-sized banks; Midlantic has \$14 billion in assets while Shawmut has \$26 billion. Both stocks collapsed during the 1990 credit crunch, the more so because they operate in the northeast, where the decline in real estate values was particularly calamitous. And both stocks have successfully turned around their businesses; their earnings will continue to expand sharply in 1994 as loan loss provisions decline and costs are brought under control. The EPS of MIDL and SNC are forecast to rise 112% and 37%, respectively, in 1994. So these are both good fundamental stories with strong near-term earnings momentum; Midlantic is rated "neutral" and Shawmut is rated "buy."

But both Shawmut and Midlantic are likely to sell out because they have the same combination of strengths and weaknesses. They are very attractive to big super-regional banks because they have strong regional franchises. With 330 branches that cater to small businesses and consumers, Midlantic has a terrific franchise in New Jersey and southeastern Pennsylvania. Shawmut has the leading market share in Connecticut and the third biggest in Massachusetts; about half of Shawmut's assets are in each state. But although they have strong regional franchises, Midlantic and Shawmut are hemmed in and lack the resources to compete head-to-head with the big super-regionals by attempting to expand regionally. With the industry consolidating rapidly, they would have to make major acquisitions, which their balance sheets will not support.

So Shawmut and Midlantic have a choice: *sell out now near the peak of the cycle and cap off impressive earnings turnarounds, or watch their competitive position erode over the next few years as giant super-regionals become even more powerful.* This is not a difficult choice to make. Midlantic would be an attractive acquisition for big New York and Pennsylvania banks such as Chemical, Bank of New York, Chase, PNC and Corestates. The negative for Midlantic is that they are still carrying too many non-performing assets right now. To get acquired, they need to be cleaner; they should be clean enough by mid-1994. So the cumulative probability that Midlantic is acquired is high, but it is not

likely to happen right away. A deal would probably be done at about two times estimated 1994 book value of \$21, or \$42 well above the recent price of \$28.

As for Shawmut, the loan portfolio is cleaner than Midlantic's, so it could be taken over at any time. Most of the Pennsylvania and New York banks that might buy Midlantic would also be interested in Shawmut as would such super-regionals as Banc One, Bank America and Nationsbank. A deal would probably occur at a slightly higher valuation than Midlantic about 2.25 times book, or \$35. The probability of a deal for Shawmut is high, but not quite as high as for Midlantic whose management was hired to turn the bank around and which has strong financial incentives, in the form of stock options, to sell the bank.

BayBanks, Inc.

This \$9.6 billion bank holding company has a superb franchise in the city of Boston and surrounding towns. Of the deposits controlled by the four biggest Boston banks, BayBanks controls half. Two key reasons for its powerful consumer franchise are an extensive network of ATMs and a management that is particularly skilled at marketing. Recent marketing initiatives include a new catalogue and a renewed push into middle market lending.

PaineWebber analyst Thomas McCandless considers BayBanks in Boston an attractive investment; takeover potential is merely "icing on the cake." After three years of contending with a devastating regional recession, BayBanks is experiencing a robust cyclical rebound in profitability. While Tom does not expect a return to the very rapid loan growth of the mid-1980s, he does anticipate a modest improvement in business conditions over the next couple of years. The company earned \$1.80 in 1992; Tom forecasts \$3.05 in 1993 and \$4.05 in 1994. Peak earnings power is \$5.50 - \$6.00.

BayBanks clearly would be a logical acquisition target for a super-regional bank that wanted to establish or expand its presence in the Boston market. Current logic suggests potential acquirers such as Fleet, PNC, First Fidelity, Corestates, Banc One, and Bank America. Because the bank is surrounded by giants, which are still growing through acquisition, it is highly likely to sell out or be approached to discuss selling out at some point in the future. Not the very near future, however; the chairman is likely to wait two-three years, until business conditions improve and earnings power is near its peak. The stock is trading around 135% of book value, reflecting its subpar ROA of 0.56%. It could probably be sold at two times book value, which in 1996 we estimate to be \$45.00, assuming current

takeover multiples of book value are prevalent three years from now.

. . . plus one in Tennessee

First American Corp.

Not unlike BayBanks, this company a leading "super-community bank" that operates throughout Tennessee and a few counties in neighboring states—ran into trouble during the banking recession of 1989-91. New management was brought in to turn the bank around in 1991. FATN went through three strenuous years of restructuring, which included a refocused marketing effort, continued vigilant watch over credit quality performance, a major outsourcing agreement with IBM, a secondary stock issue raising \$41 million and a tight rein on expense growth. These efforts have been successful in restoring financial health; indeed, earnings in the second quarter of 1993 were much better than expected. Thomas McCandless estimates that EPS will rise 12% in 1994 to \$3.65.

First American has a strong franchise in Tennessee, a relatively fast-growing state. In most of the towns where it has branches, FATN has the first, second or third largest share of deposits. There are many super-regional banks in nearby states—including SunBanks, Nationsbank, Boatmen's Bancshares, Banc One, Huntington Bank, and National City—that might be interested in buying FATN in order to quickly build a presence in Tennessee. Now that it has successfully restructured and cleaned up its balance sheet, FATN is particularly attractive. The stock is trading around 140% of book value, which is growing at an annual rate of 10%. A buyer would be willing to pay 200% of book. But even if FATN is not acquired it appears to be a good investment with a 9% secular growth rate; Tom rates it "attractive."

Some bite-sized thrifts

Large East Coast commercial banks are on the prowl for small banks and thrifts, generally with \$500 million to \$1.5 billion in assets, that can add market share and boost their earnings in a period of weak loan growth. Large banks can afford to pay a significant premium for these institutions because their stocks have traded at healthy P/E multiples and post-acquisition costs can be cut by 30% or more when overhead is slashed and branches are consolidated. In New England, four institutions are on the acquisition trail: Bank of Boston, Shawmut, Fleet Financial, and Citizens Financial. At least five major deals have occurred already in Massachusetts; the two most recent were Sterling Bancshares at a 50% premium and Newworld

Bancorp. at a 25% premium. The take-out premiums have ranged from 20 to 60% above market value.

PaineWebber analyst Stephanie Giroux has developed two proprietary methods for estimating the takeover value of small-cap banks and thrifts. The first looks at the targeted institution's normalized earnings power as well as the incremental earnings potential to an acquirer from operating expense savings, funding cost savings, and leveraged excess capital. The second method, a regression based formula, looks at both normalized earnings and tangible book value. Table 1 lists three companies recommended by Stephanie that have not yet been acquired, together with estimated takeover value. In general, acquirers are paying about 13 times normalized earnings and 1.3 - 1.9 times book value.

Table 1

Takeover valuation of three small cap banks & thrifts

Company	12/14/93 Closing price	Earnings-based takeover valuation
Andover Bancorp	\$16.13	\$26-29
Maryland Federal	25.00	43-46
Medford Savings	30.75	44-50

Andover Bancorp

Headquartered in an affluent bedroom community 25 miles north of Boston, Andover has total assets of \$780 million. Its eight branches house a relatively high \$65 million in average deposits per branch. Although largely a residential mortgage lender, the bank has been working to build its consumer and commercial lending businesses. Because three of the four potential acquirers already operate in Andover's primary market, cost saving potential from an acquisition of Andover is high. This stock is currently attractive on fundamental valuation as well.

Maryland Federal Bancorp

This company is not an immediate takeover candidate. An offer for the institution could be two years away given that further consolidation will be necessary first among remaining area banks. With this time frame in mind, Maryland Federal represents an attractive acquisition candidate due to its superior asset quality and extremely healthy capital levels. Headquartered in Hyattsville, just outside of an attractive Washington D.C. banking market, Maryland Federal also represents the second largest publicly traded thrift in Maryland. The largest is in a less attractive Baltimore market. Maryland Federal also currently offers roughly 25% upside on fundamentals.

Medford Savings Bank

Headquartered only eight miles from downtown Boston, this institution operates in desirable Middlesex County. Although its four Middlesex markets tend to be less affluent and more blue-collar oriented, the bank has dominant market share (roughly 40%) in two of these markets (Medford and Malden). The institution offers relatively good size with \$831 million in assets. Insiders own about 11.5% of the stock.

Investors should bear in mind in the case of Medford Savings that this stock is currently close to fair valuation on fundamentals.

A large S&L on the West Coast

CalFed: Checkered history, but valuable branch network

Large banks interested in expanding their branch networks in California and Florida, two of the wealthiest states in the U.S., might be interested in acquiring California Federal Bank, the fifth largest S&L in the country. CalFed is a troubled S&L whose stock has collapsed 93% since 1986 because of over \$1 billion in loan losses to date and \$1.2 billion in current problem assets. The great majority of those losses were not in CalFed's bread-and-butter business of home mortgages, but rather in exotic lending activities that CalFed unwisely ventured into during the "go-go years" of the late 1980s—a shopping center in Alaska, raw land in California, office buildings in New York, etc. Even after writing down the disasters, CalFed has about \$17 billion in assets, 183 branches, and a very loyal set of depositors who have stayed with the thrift through nearly four years of horrible publicity.

The company, which has a totally new management and board, was recapitalized this year and instituted a 1-for-5 reverse stock split. Like other banks and thrifts in California, we have seen evidence of a peaking in its problem loans, which should begin a long-term decline over the next several quarters. PaineWebber analyst Gary Gordon forecasts that CalFed will lose \$1.40 per share in 1993 but should be profitable by 1995. Normal earnings power is \$2.50-\$3.00 per share, which should be achievable by 1996.

Logical buyers of CalFed include both California institutions such as First Interstate, H.F. Ahmanson, and Great Western, and out-of-state firms such as Banc One and Nationsbank. For all of these firms the attraction is the opportunity to quickly build or expand a presence in Florida and California by adding 183 branches. (A few branches are in Nevada and Georgia.) If a sale were done today, the price would probably be \$20-23, or one times tangible book of \$23.50 and a 38-59% premium to its

recent price. A buyer would not pay more than one times book today because CAL needs to make up to \$300 million in additions to loan-loss reserves. However, two years from now, if the company is in the black and the balance sheet is more clearly on the mend, the price would probably be \$30-35.

Whether a deal happens later or sooner, there is a relatively high probability that one will occur. Management and the board of directors have a mandate to realize share-

holder value; many of CalFed's most powerful shareholders are former bondholders who manage "vulture funds." They have already made large profits from their involvement in CalFed. They presumably would be quite willing to sell out today at a moderate premium to current market value, rather than hang onto the stock for the long term and a presumably 50% higher takeover valuation because of their large gains already and the economic risks of waiting.

Beverages

Dr Pepper/Seven-Up: A key piece of Cadbury's U.S. strategy

The probability is quite high that, within two years, Cadbury Schweppes will buy the 74% of Dr Pepper/Seven-Up that it does not already own. This is not exactly a novel idea; it was the subject of a *Barron's* cover story a couple of months ago. But although a Cadbury buyout of Dr Pepper would shock nobody it would still be good news for Dr Pepper shareholders because the event is far from being "in the stock." PaineWebber beverage analyst Manny Goldman estimates that if it did the deal today, Cadbury would probably have to pay \$27-29 anyway to acquire DPS (whose management has instituted a "poison pill" and promised to fight the deal). With the stock now trading at \$22 1/2, that would produce a gain of 20-30% for shareholders. And if for some reason Cadbury elects *not* to buy the rest of Dr Pepper, the downside for DPS shareholders is limited. At its current multiple of 21 times 1994 EPS, Dr Pepper's valuation is reasonable because it is situated in the best segment of the U.S. soft drink market and should be able to expand EPS at a 20% clip. In other words, the acquisition potential merely makes a good story better.

Cadbury Schweppes is a major U.K. company with a 200-year history and about \$6 billion in revenues, divided about equally between candy and beverages. It has a strong franchise in Europe in both candy and beverages but has no presence in the U.S. candy market, having licensed the Cadbury and Peter Paul names in the U.S. market to Hershey.

Cadbury's American plan

Cadbury is, however, in the process of building a position in the U.S. soft drink market, the largest in the world.

Cadbury's CEO, David Wellings, explained to *Barron's* why the U.S. market is so important: "There are sound reasons that the U.S. soft-drink market is an especially high priority for us. It is an enormous market, totaling perhaps 34% by volume of world sales. It is so large that it tends to be a kind of cradle, the genesis of new developments. If you don't have a significant presence in this market, then I can't see how you can claim to be a global player. We want to be—we have to be—a global player."

Mr. Wellings is building its U.S. soft drink franchise piece by piece. The first piece was Crush, Canada Dry, Schweppes and other brands that together had only 3.4% of the U.S. Then in August of last year, it acquired A&W Brands, the leader in the root beer market, which gave it another 2.2% of the U.S. soft drink market. The following month Cadbury, which already owned 5.7% of Dr Pepper/Seven-Up, purchased 20.2% of the company from Prudential Insurance. If Cadbury buys the rest of Dr Pepper it will have a hefty 17% of the market, consisting of three pieces:

Cadbury (Schweppes, Canada Dry, etc.)	3.4%
A&W	2.2%
Dr Pepper/Seven-Up	11.5%
Total:	17.1%

This would give Cadbury the major presence in the U.S. soft drink market that it covets. Better still, it would have about *half of the fastest-growing segment of that market*—the non-cola segment. The Dr Pepper brand is particularly attractive because it has shown an ability to achieve high per capita consumption in certain parts of the U.S. In other words, like colas and unlike lemon lime concoctions it is "guzzleable." With a 17% market share, Cadbury would have greater economies of scale and more clout

with bottlers and maybe with retailers. This is particularly important when you have to fight for position against the likes of Coca-Cola and PepsiCo.

As noted, Dr Pepper management is not eager to sell out to Cadbury and has instituted a poison pill. So Cadbury would probably have to pay a significant premium to gain control. If it paid \$28 per share, that would be 25 times 1994 earnings and about 21 times 1995 earnings—which is no great bargain. There are, however, a few reasons why Cadbury would be willing to pay up for DPS. First and most important, Cadbury is a strategic buyer with a very long time horizon and no alternative way to realize its goal of rapidly building a major presence in the U.S. soft drink market. Second, by combining the headquarters operations of Cadbury USA, A&W and Dr Pepper, the company could reduce overhead.

Third, Dr Pepper has a lot of debt that could presumably be refinanced at lower rates. Manny Goldman estimates that pre-tax interest expense in 1994 will amount to 9.4%

of revenues, nearly as much as after-tax income from continuing operations, which will be 9.8% of revenue. As one would expect of a former LBO, Dr Pepper has a relatively low credit rating; some issues are rated B- by S&P and such issues normally yield a hefty 300 basis points more than top-quality corporate debt. Cadbury, by contrast, has a fairly high credit rating. If Cadbury refinanced DPS debt and managed to cut interest expense by 20%, and if one assumes a tax rate of 40%, then after-tax income would theoretically be boosted by 11.5%, a non-trivial amount. (This is an illustration, not a forecast.)

Although Cadbury clearly would like to own Dr Pepper and could afford to buy it, there are no obvious factors (such as a rival bidder) that will force it to buy sooner rather than later. So there is certainly no guarantee that Cadbury will make a bid within the next two years (or at any other time in the future, for that matter). Fortunately, DPS is a good investment on its own account; an acquisition bid would merely make a good story better.

Chemicals

Monsanto: Restructuring likely to continue

There is a good likelihood that Monsanto will take further deconstructing actions that will boost the stock price. If management continues aggressively cutting costs and selling assets, PaineWebber chemical analyst Andrew Cash believes MTC could reach \$100 in two or three years.

Over the past decade Monsanto attempted to grow earnings through heavy investment in relatively risky R&D projects such as biotechnology. Despite potential successes such as BST, the hormone that boosts milk production in cows, this strategy has not worked very well, and MTC has been a rather disappointing stock. On the other hand, it has not been a terrible performer mainly because it had two patented products, NutraSweet and Roundup, that were highly profitable and threw off plenty of free cash. Much of this cash was used to repurchase shares. While both of these products recently lost patent protection in the U.S., they continue to be valuable products nonetheless.

Shift to a cost-based earnings growth strategy

MTC has been moving away from its high-stake, blue sky R&D effort toward a strategy based on cutting costs and

allocating capital more carefully. The person in charge of implementing this strategy is its new Chief Operating Officer, Robert Shapiro, who assumed his post on January 1, 1993. Mr. Shapiro has already made considerable progress, and this has been reflected in the stock price. The most visible indication that Monsanto is on the right track is that marketing expenses—over 10% of sales—declined in the third quarter, after being up 11% through the first half.

Searle

To see what further restructuring actions could be taken, let's look at each of Monsanto's four divisions. At its poorly performing G.D. Searle *pharmaceuticals* division (which represents approximately 25% of total corporate assets), Monsanto has already curbed its biotech R&D spending and is focusing on the development of only those drugs that have a high chance of success. A deadline has probably been set by which time Searle must generate acceptable returns. Indeed, Mr. Shapiro has indicated that if Searle cannot make the necessary changes to adapt to the competitive health care environment, MTC will exit this business. But recently Searle's profit performance has been

improving. This favorable trend may be parlayed into a value driven joint venture.

Ag chemicals

Monsanto's *agricultural chemicals* division manufactures one of the world's safest and most popular herbicides, Roundup. Although it recently came off patent outside the U.S., the company has managed to increase market share by cutting prices. Double-digit volume gains have more than offset price cuts. MTC also recently acquired Ortho, a lawn and garden pesticide business; this shrewd acquisition should be additive to earnings in 1994. Looking forward, the ag chemicals business is likely to be a steady cash generator, and is unlikely to be restructured or sold off. Roundup should benefit from the shift to minimum till farming practices in the U.S., which are designed to preserve top soil.

NutraSweet

Mr. Shapiro came to Monsanto as part of the NutraSweet acquisition and is best known for pioneering this leading branded food ingredient. Although NutraSweet recently came off patent in the U.S. (having lost patent protection earlier outside the U.S.), the company has done a commendable job of maintaining market share with only a limited reduction in cash flow. However, more restructuring is possible. NutraSweet should grow earnings at about 3-5% per annum over the next two years, but then earnings should accelerate as the product is introduced into more markets overseas.

Basic chemicals

Of all Monsanto's divisions, this one is likely to experience the most restructuring in the near future, because management wants to divest operations that generate a low return on assets. In coming months, there could be more an-

nouncements about asset sales, following the maleic and detergent chemicals divestitures. However, the most profitable parts of Monsanto's chemicals business are likely to remain untouched. The largest and most profitable segment of this business manufactures nylon for the U.S. carpet industry, where demand is strong right now. Another important product is Saflex, used in the manufacture of safety glass for car windshields. This too is a good business with a solid franchise, but the slump in the auto industry in Europe has hurt earnings recently. This business has only one way to go—up.

Strong EPS growth in next few years

Just from cost-cutting alone, Monsanto should be able to grow earnings at a 20% rate over the next three years. There are huge opportunities to improve profitability. SG&A is about 21% of revenues and R&D is 9%, while the net margin is 5%. So if SG&A plus R&D were shrunk from 30% to 25% of sales, then, all else equal, the net margin would double from 5% to 10%. Roughly 25% of the company's assets are in Europe, but these operations have not been contributing much to earnings recently. With interest rates coming down on the Continent, European profitability should rebound.

Applying a multiple of 14x to earnings of \$7 in 1996 gives a price target of \$100. An important factor that should help MTC get to this price is that the company is a powerful free cash flow generator—to the tune of over \$2.00 per share. The company, which is forecast to earn \$5.00 in 1994, must earn just \$2.00 to cover its capital spending and dividend. The company will probably use its excess cash to buy back more shares (it has already bought back one third of the shares outstanding in 1985), as well as to pay down its moderate amount of debt and increase dividends at a healthy pace.

Energy: Exploration & production

Large E&P firms: Consolidating the oil patch

Typically, America's independent energy companies get into the big leagues by making smart acquisitions. Lately they have had plenty of opportunities to do that, and acquisitions are likely to continue at a brisk pace as the upstream end of the U.S. energy sector restructures. On the one hand, big integrated oil companies are trying to

sell producing and prospective properties, because they intend to cut costs, rationalize their business, and focus their efforts on overseas explorations, where really big discoveries can be made.

On the other hand, independent production companies are well positioned to acquire properties or entire companies. Following a broad-based restructuring in the late

1980s and early 1990s—when oil prices bounced around and the natural gas business was deregulated—independent producers have tightened their operating cost structures and strengthened their balance sheets. Furthermore, the outlook for energy prices is reasonably upbeat. And many buyers have been able to improve the profitability of the properties they bought because the previous owners, anticipating divestiture, had not been tending them properly. Consequently, acquisitions of upstream assets by E&P firms have generally been additive to earnings, cash flow and asset values. A number of companies—notably Apache, Noble Affiliates and Louisiana Land—have been catapulted into the Big Leagues.

Still cheap versus asset values

PaineWebber E&P analyst David Bradshaw believes that in coming years many independent firms will look beyond merely buying portfolios of producing properties. Instead they will acquire other E&P companies or entire divisions of the integrated energy giants. One motivation for this strategy will be improving confidence about the longer-term energy price picture. But the key reason is that, despite a rebound in E&P stock prices since the second quarter of 1992, *these stocks are still cheap, relative to steadily improving asset values.*

Trading at an average 73% of commodity-based break-up value estimates based on year-end 1992 reserve estimates (the latest available) and modest energy price forecasts, current stock market valuations are capturing:

- neither the basic commodity component of the group's operation,
- nor any element for ongoing upstream investment,
- nor any element for the companies as going concerns.

Since 1977, market valuation has ranged from 48% to 163% of reserve estimates, so at 73% they are still cheap.

When thinking about valuation, it is important to remember that asset values are climbing. David Bradshaw's recent conversations with management indicate that 1993 has been an exceptional year with the drillbit, as well as successful application of oil field technology and many well-conceived acquisitions. Consequently, by the time the ink dries on 1993 analysts will have raised their estimates of asset values by 10-15%—not bad when nominal GDP is growing at a 5-6% pace.

Also cheap on a cash flow basis

The E&P group is selling at an average 6.0 times 1993 cash flow and 4.7 times PaineWebber forecasts for 1994

cash flow. Historically, this has proven to be an attractive multiple to pay; cash flow multiples have ranged from 3.2 to 11.3 since 1977. Furthermore, PaineWebber's cash flow estimates are conservative because they impute no component for prospective exploration and acquisition successes. Given the reasonable valuations, the strength of cash flow, and the high leverage to better energy prices, shrewd acquisitions of E&P companies would not be too far from being self-financing.

Determining acquisition potential

In thinking about which deals may occur in the oil patch, it is useful to determine the purchasing power an independent has to buy properties without looking to the debt or equity markets for outside capital. This involves the following basic steps:

Step # 1

Of course, oil and gas reserves are an independent's major source of cash flow. The pretax SEC PV 10 (a filing required by the SEC) is the present value, using a 10% discount rate, of a company's energy reserves assuming they are produced for six years with the current cost structure, in a flat pricing environment. Half of this amount represents a conservative borrowing base on which a company can build, adding to it its other sources of cash and available bank credit.

Step # 2

Cash flow from other operating components can also be focused on acquisitions. If the company has any other cash generating assets such as gathering or transmission systems, their value is calculated using a conservative multiple of five times operating cash flow (defined as revenues minus cash expenses).

Step # 3

The company's current net cash on hand can be used to finance acquisitions as well. Long-term debt obligations are then subtracted, and year-end cash and cash equivalents from the balance sheet are added.

Adding together the amounts calculated in these three steps reveals a company's available liquidity. Firms can typically borrow twice this amount from revolving bank credit facilities, usually at 6-9%, to finance acquisitions. Most deals done in the last year have been in the range of \$5.00 - \$5.50 per equivalent barrel of oil, so we assume an average cost for acquired reserves to be \$5.25 per EOB. Dividing total borrowing power by \$5.25 yields the quantity of reserves that an independent could buy.

Table 2
Price/Asset value and acquisition firepower
of E&P cos.

	Price to asset value (%)	Acquisition firepower (\$ millions)
Anadarko	102.8	1,020.5
Apache Corp	94.2	598.1
Box Energy	94.6	50.0
Burlington Resources	72.2	3,848.8
Clayton Williams Energy	45.6	155.4
Cross Timbers	55.4	155.1
Devon Energy	73.4	150.0
Enron Oil & Gas	99.7	2,158.6
Forest Oil	48.4	(47.1)
Gerrity Oil & Gas	62.3	179.1
Louisiana Land/Exp	58.5	923.5
Maxus Energy	28.4	(51.8)
Mesa Inc	29.9	(918.9)
Noble Affiliates	74.6	758.5
Nuevo Energy	71.0	144.2
Oryx Energy	44.4	1,235.6
Parker & Parsley Petrol	52.3	200.0
Plains Petroleum	57.5	243.4
Pogo Producing	122.5	335.8
Sante Fe Energy Res	56.3	469.3
Snyder Oil Partners	85.9	343.1
Tide West Oil	75.2	100.0
Triton Energy Corp	60.2	1,082.1
Union Pacific Res	na	4,689.0
Wainoco Oil	44.1	(83.7)
Market weighted average	72.8	
Aggregate		17,738.4

The 25 companies in Table 2 could collectively borrow \$17.7 billion in capital. That is a lot of money—enough to increase the group's reserve base by more than 60% above its current level. Enron Oil and Gas, Burlington Resources and Union Pacific Resources could theoretically acquire reserves equal to roughly ten times their respective estimated 1993 production. Noble Affiliates, with low debt and considerable cash available, could increase its reserve base by 125% of the 114 million equivalent barrels it holds without jeopardizing its financial flexibility. And Snyder Oil, after only recently digesting a \$50 million acquisition, could boost its MMEOB (million barrels of equivalent oil) by 75%.

Of course, a key question is: who will these companies buy? The fact is that virtually every one of the E&P companies could be acquired.

Three small cap takeover candidates in the oil patch

Small capitalization oil service companies are acquired for any number of reasons, but recently the two most common have been:

- Industry consolidation which immediately leads to operating synergies and cost savings;
- Strategic diversification into new market segments that offer better growth potential.

By contrast, in the small cap **exploration & production sector**, the most common motivation for acquisitions is value—the opportunity to buy oil and gas assets/reserves more cheaply than they could be created through exploration drilling. Currently, in the E&P segment of the industry, most of the acquisitions (which have been numerous) are private property purchases rather than acquisitions of entire companies. However, as the outlook for the U.S. natural gas market improves, E&P companies raise equity capital, and the declining cost of capital lowers E&P companies' rate of return requirements, the price of private market property transactions is rising.

Higher values for private properties will encourage acquisition of public firms

Historically, E&P companies have been able to purchase new reserves for an average of \$5.00 per barrel of oil equivalent, but in recent transactions companies have paid substantially more than that. Due to escalating property prices, particularly in the larger sized property transactions (\$100 million to \$400 million range), the keys to making a transaction successful are: 1. consolidation cost savings; 2. reducing production costs via operating efficiencies; and, 3. added reserves from enhancement and development activity.

As a result, PaineWebber analyst Mark Kellstrom believes, during the next year two trends will emerge in the E&P sector:

- Exploration & production companies will begin to focus on adding reserves by drilling more rather than buying properties;
- E&P companies will increasingly want to purchase public independent oil companies that are trading in the market at a valuation below comparable private market transactions.

Because they have small capitalizations, virtually all the stocks followed by Mark could be acquired, but three appear to be particularly ripe for the plucking: ICO, Tetra Technologies and Tide West Oil Co. All have one thing in

common: They offer excellent value at current public market prices.

ICO, Incorporated

A domestically based tubular coating and inspection company with 1993 revenues of \$60 million and a market capitalization of \$46 million, ICO is a likely takeover candidate for four reasons:

- The stock is cheap and a transaction at a 50-100% premium to ICO's current stock price would most likely be non-dilutive. It is trading at 11.5 times estimated 1994 EPS, 5.8 times 1994 cash flow estimate and at 56% of discounted cash flow value. By these parameters, ICO is cheap relative to the group.
- ICO has a strong niche in the domestic coating and inspection business and would make an excellent strategic/synergistic fit with a larger oil service company such as Enterra Corporation or Weatherford Corporation;
- ICO's industry is highly consolidated, with ICO and its principal competitor, Tuboscope, controlling 70-90% of it. This makes this market segment desirable for entry through acquisition by an outside service company. Pricing is improving as domestic drilling increases.
- ICO's revenue base is 90% domestic, providing a purchaser with a strong international franchise the opportunity to integrate ICO into its international operations.

Other attractive features of ICO's business include:

- Strong balance sheet and good management.
- ICO's core business has high earnings leverage to improving domestic drilling activity, particularly gas related drilling activity; 40-50% of revenue flows through to operating earnings. A 10% increase in revenue driven by higher activity adds \$0.20 per share to earnings.
- In 9/92, ICO purchased Baker Hughes Tubular Services, dramatically increasing its domestic market share, nearly doubling its revenue base to \$60-65 million while eliminating \$7.3 million (\$1.00 per share) in costs by combining operations. ICO is the low cost producer.

Tetra Technologies

Tetra, a completion fluids company with 1993 revenues of \$65 million, is a good acquisition candidate for four rea-

sons: 1. The stock price is at or below its asset value and represents excellent value to a buyer, particularly one that can generate consolidation cost savings; 2. Tetra's core business would be an excellent strategic fit with a larger oil service company; 3. Tetra's waste treatment business, which is a non-core non-performing business, could be sold off to reduce the overall cost of the deal; and, 4. Tetra has moderate to good leverage to improving domestic gas drilling and workover activity in the Gulf of Mexico.

Tetra's completion Fluids business makes a good strategic fit for a larger oil service company

Tetra's core division is its completion fluids division; completion fluids are used to complete oil and gas wells (i.e., a well is "completed" by putting metal casing in the well bore), particularly in the offshore Gulf of Mexico. This business generates 60-70% of revenues and virtually all of operating profits. Tetra, which has a leading 40% market share in the lower 48 states, is the low cost producer and the service leader. Increasing Gulf Coast gas related drilling and workover activity (both onshore and offshore) should lead to higher earnings in this division in 1994. This business would make a good strategic fit for a larger company in the drilling fluids business such as Baker Hughes, Dresser or Halliburton.

With problems in waste treatment division being addressed, it could be sold piecemeal

Tetra's stock has underperformed due to weak operating results over the last 18 months. The main culprit was disastrous results in the waste treatment division, which on an operating basis lost \$4.6 million on \$13.4 million in revenues in 1992. Tetra is currently restructuring this division and cutting costs; it should be profitable by year-end 1993. As noted, an acquirer could sell this division to reduce the cost of the deal.

Tide West Oil Company

Tide West Oil Company, an independent oil company based in Tulsa, Oklahoma, is a prime acquisition candidate. Plain and simple, it is dirt cheap. It is trading at 10 times estimated 1994 EPS of \$0.90, at 4.2 times 1994 cash flow per share estimate of \$2.15 and at 75% of \$11.80 asset value per share. Furthermore, this figure will be substantially revised upwards at year-end to the \$15-\$16 per share range due to added reserves from acquisitions. Tide West appears undervalued relative to the E&P group, which currently trades at an average of 6.2 times 1994 cash flow estimates. Other virtues of the company are:

- *Strong management team* with a demonstrated record of creating value by making favorable acquisitions and then enhancing reserves and production. Management, which owns 10% of the equity, has significant personal wealth tied up in the company so its interests are aligned with shareholders. A Connecticut-based investment company owns another 48% and presumably would not be averse to selling out at the right price.
- *Favorable growth record through acquisitions.* Management has grown reserves from less than 1 million barrels of oil equivalent (BOE) to its current (year-end 1992) size of 16.7 million equivalent barrels oil. The company has created an SEC 10 present value of \$98 million by investing \$55 million on acquisitions over the last several years. Management's growth strategy is to buy very small properties.
- *Low cost producer.* Tide West current production and SG&A cost per barrel of equivalent oil produced is substantially lower than the E&P company group average. Tide West's low cost position increases its leverage to rising oil and gas prices and lowers its sensitivity to decreasing prices.
- *Strong balance sheet.* approximately \$6 million in cash, no debt, \$55 million in equity and an unused \$30 million credit line currently. Tide West is well positioned to continue to make acquisitions, provided attractive opportunities are available.
- *High leverage* to an improving gas market because 86% of Tide West current reserve base is natural gas.

Energy: Oil

Elf Aquitaine: Logical restructuring candidate

Elf Aquitaine, the French oil company, is the 9th largest oil company in the world and the largest company on the Paris Stock Exchange, in terms of market value. With 1992 sales of \$37.9 billion, it is engaged both in "upstream" (exploration and production) activities (notably in Africa) and "downstream" (refining and marketing) activities. The French government owns 51% of Elf but has announced its intention to privatize it early in 1994 by selling a significant share of the company to investors.

In the opinion of PaineWebber oil analyst Bryan Jacoboski, it is likely that Elf will carry out a restructuring program fairly soon. There is no guarantee that such a program will in fact be announced, but there are some compelling reasons for believing that it will:

- Elf's return on capital employed has declined over the past four years and is now the lowest in the industry. If there is no credible prospect that these returns will improve, the privatization program may fail. This would be a serious embarrassment to the government because Elf is France's "flagship" company and among the first of many companies that are slated to be privatized.

- The French government has a strong financial incentive to restructure Elf and boost its profitability. Even after further privatization, France will be Elf's leading shareholder and therefore the chief beneficiary of any stock price rise that may ensue from restructuring.
- Elf recently appointed a new CEO, and it is very common for new CEOs of major oil companies to carry out restructuring programs that cause the stock to outperform the S&P 500.
- Elf recently lowered its long-term oil price forecast which typically is a precursor to layoffs, asset sales and reduced exploration spending.

Let's take a closer look at these points:

Elf's financial performance has slipped

Between 1989 and 1992 Elf's debt nearly doubled, and the ratio of debt to total capitalization rose from 24% to 33%. Higher debt is not intrinsically bad, but Bryan Jacoboski points out that in this case it was not used to finance good investments. For example, Elf purchased Occidental's North Sea fields for \$1.4 billion, although PaineWebber valued them at only \$700-\$800 million. Elf also spent \$550 million to acquire perfume maker Yves St. Laurent, which was earning only \$25 million, even though the synergies between selling fragrances and gasoline are

not exactly self-evident. Some of these poor investments were made in the name of “diversification” away from the oil business and a reliance on West Africa; profitability was not the chief concern. Whatever the motivation, they led to lower financial returns. Between 1989 and 1992 Elf’s earnings per share declined from \$3.75 to \$2.01 and its Return on Capital Employed (ROCE) dropped from 12.1% to 3.6%, making it one of the least profitable major oil companies.

A new CEO

In July 1993 a new CEO took the reins of Elf: Philippe Jaffre, a man with no experience in the oil business but a strong financial background. Prior to coming to Elf, Mr. Jaffre had been chairman of Credit Agricole, France’s largest bank, for five years. Prior to that, he spent ten years at the French Treasury. The advent of a new CEO is auspicious. Bryan Jacoboski points out that it is very common for a new CEO to come to the helm of a large oil company, institute a restructuring program, and cause the stock to outperform over the next twelve months. In fact this has happened seven of the eight times in the last several years that a new CEO has come to power at a major oil company.

Table 3

Elf’s profit per employee is very low relative to its peers

	1993E Net Income (Millions)	Employees (Thousands)	Profit per Employee (Thousands)	'92 Assets (Billions)
Exxon	\$4,482	95	\$47	\$85
YPF	498	11	47	7
RD/Shell	5,650	127	44	101
Chevron	2,097	49	43	34
Arco	972	27	36	24
Repsol	684	20	35	12
Amoco	1,593	47	34	28
Mobil	2,079	64	33	41
Texaco	1,082	38	29	26
Unocal	312	15	21	9
BP	1,513	98	15	53
Phillips	324	21	15	11
Total	651	51	13	21
Elf Aquitaine	812	88	9	45
Marathon	136	23	6	11

Source: Company financial statements, PaineWebber estimates.

How to improve financial performance

The ways in which Elf’s new CEO is likely to improve returns are similar to the actions taken at many other companies in recent years: Articulate explicit and meaningful financial objectives, write-down or sell underperforming assets, apply more stringent criteria to the capital budgeting process, and reduce costs. As to the latter issue, there may well be room for headcount reductions; Elf’s profit per employee is very low relative to its peers (Table 3). Elf has nearly as many employees as Exxon but half the assets. Although Elf and Mobil have roughly the same total assets, Elf has 24,000 more employees (e.g., 88,000 versus 64,000) and its profit per employee is only one third Mobil’s.

The potential payoff: Big

If Elf decides to restructure, it is likely to do so sooner rather than later. The government has suggested it will reduce its 51% ownership in Elf in early 1994. At the very least, Elf will have to announce the specific steps the company will take to improve its returns as part of the road show. A credible plan for improving the company’s 3.6% ROCE is essential to fulfilling the government’s desire to monetize a substantial portion of its \$10 billion worth of Elf stock. Without it, the Elf privatization could fall flat and the rest of the privatization program could be deferred.

If a credible restructuring is in fact carried out, the upside for shareholders could be big. If Elf returned to the 12% ROCE of 1989—which is achievable in two years—earnings could approximate \$5.50, in the judgment of Bryan Jacoboski. Depending on the valuation of the French market, these earnings would support a stock price of \$70-80 or double recent levels.

Entertainment

And then there was one—Disney

The bitter battle for Paramount, investments by telephone companies in cable television, and the introduction of a variety of new services on the electronic highway are all part of the ongoing consolidation of content manufacturers, electronic distribution systems and demon marketers. At the end of the day, PaineWebber entertainment analyst Christopher Dixon believes, *the big winners will be the major entertainment brands*. Those brands will generate enormous cash flow and returns to investors as the U.S. domestic multichannel universe is replicated outside the United States over the next decade. At the head of the pack is Disney, followed closely by Time Warner, Viacom, Turner and News Corp. Waiting in the wings is the reemergence of MGM.

More acquisitions, at heady valuations

As the global convergence materializes, many new entrants in various countries will be looking to "jump on the bandwagon" through acquisitions. More mature, well capitalized local businesses will want to participate in a high growth, high visibility industry that enjoys stable demand and scale economies. Each of the companies will also feel pressure to increase in size to compete. The net result will be additional acquisition activity. Notwithstanding the Japanese experience with Columbia/TriStar and Universal, studios and libraries will continue to command the highest premiums. This—coupled with the ability of larger companies like Disney to generate significant cash flow as they build up their production capacity and internally expand their library—can make for heady valuations.

For investors, this is great news. But let's put it in perspective. Since the purchase of Columbia TriStar by Sony,

and Matsushita's acquisition of MCA, premiums have expanded rather dramatically. Should the Paramount acquisition close above \$80 per share, a new and much higher bench mark of over 18 times trailing cash flow will have been established. This is one and one half times the 12 multiple paid by the Japanese. To put this in perspective, that would suggest a target for Disney of \$57 per share, or \$77 for Time Warner, a 35% premium to current market values.

This is not to suggest that either company will be acquired. In fact, we view both as net buyers and ultimate survivors. However, Disney is more focused, less diverse and more closely held. Thus in time, particularly as the Disney family becomes less involved with day to day operations, *the potential for a sale should not be overlooked*. The potential to expand operations outside the United States, coupled with a longer term strategy of taking advantage of the electronic highway's ability to deliver Disney product, will force the company to expand its operating base.

That in turn should help fuel cash flow growth. Should the company achieve its targeted 20% annual growth rate and be able to ride the technology and increased capacity curve, Disney should be able to generate over \$11 per share in cash flow by the end of the century. Should a slumbering giant then decide to enter the global entertainment / telecommunications industry, the acquisition cost could approach \$200 per share. A buyer will be willing to pay a high price because Disney will be one of the very few major entertainment brands available for purchase. Given the current price of the stock, that implies an annual return to shareholders of over 28%.

Food

Two consolidation plays in the U.S. food industry

As disinflation has spread from the factory to the supermarket over the past few years, sales growth of major U.S. packaged goods companies has slowed to about 7%, from 14% or so in the late 1980s. And that refers to *worldwide* sales; growth within the U.S. is even slower.

In this environment it is extremely difficult and risky for packaged food companies to try to build brands from the ground up. It is nearly as risky to buy a secondary brand and try to expand its market share. Unless you are operating in a new category where no player is dominant, you are likely to get hammered by the leader in the category, who will successfully lower prices to defend market share.

To be sure, his profits will be squeezed by price cutting—but *your profits will pretty much disappear*. Just ask the folks at Anheuser-Busch's Eagle Snacks Division, who tried to grab share from PepsiCo's Frito Lay a couple of years ago. Eagle makes a mighty fine potato chip, but they haven't made much money since Frito Lay counterattacked but cutting prices and costs a couple of years ago.

Buying strong brands makes sense

Instead of building brands from the ground up, it makes sense for big companies that want to expand in the U.S. food business to buy companies with powerful brands. Three factors make this strategy sensible now:

- In the wake of "Marlboro Friday," equity investors' love affair with branded companies has soured. But earnings, for the most part, have continued to rise. So the stocks are cheap for a strategic buyer.
- Large firms have the free cash flow and borrowing power needed to finance acquisitions, particularly because the companies they might acquire also have strong cash flow.
- As with the waste management stocks, there are *bona fide synergies* in food industry mergers. A large firm such as Nestle can acquire a medium-sized U.S. firm with strong brands; rationalize the management and distribution network of the acquired firm; and use its own distribution network to sell the products of the acquired firm. Operating leverage can be achieved by pushing more products through the distribution system.

In the judgment of PaineWebber food analyst Roger Spencer, two food companies that are logical acquisition candidates are **Gerber Products** and **Pet Inc.**

Gerber Products

With \$1.2 billion in sales, Gerber has a dominant 71% of the slow-growing U.S. baby food market. As GEB's growth prospects have dimmed over the past 18 months, the stock has dropped from the mid-\$30s to the high-\$20s. In the future, EPS is likely to grow 8-9% annually, with most of the growth coming overseas.

Though this is no longer a sizzling growth story, as it was from 1985 through 1991, GEB is still a stable and highly profitable business with after-tax margins of 10%. Gross cash flow in fiscal 1994 (ends March '94) will be over \$160 million per year and capital spending about \$60 million per year. GEB has used the free cash to raise the dividend and buy back shares.

A large food company, whether domestic or foreign, might well want to acquire Gerber in order to add a premier brand, with a high market share and high profit margins, to its U.S. product portfolio. Gerber's products could be pushed through the distribution system of just about any firm that sells dry groceries. Possible buyers include Nestle (which tried to get into the U.S. baby food market via Beechnut), Unilever, BSN Group or Quaker Oats. Management might possibly fight the acquisition, but it is unlikely that it could stop it. As to the price of a deal, there has not been a major food industry acquisition in recent years for less than 20 times after tax earnings; based on fiscal 1995 EPS of \$1.95, that implies a price of \$40, roughly a 40% premium to the recent market value.

Pet Inc.

This food company has \$1.5 billion in sales and some excellent brands, but PT may not have the critical mass and market clout needed to prosper in the supermarket jungle of the 1990s. Its Old El Paso is the number one brand in the Mexican food category, which is very attractive because it is growing at a high-single-digit pace. The Progresso brand is a strong number two, behind Campbell's, in the ready-to-eat soup category; unit growth of this business is a health 3-4%. DownyFlake is number two in frozen waffles and Van De Kamp is strong in frozen seafood.

Pet has decent gross margins of about 53%, and operating margins are about 15%. Earnings growth should be slightly higher than at Gerber—around 9.5%, in the opinion of Roger. The company is a pretty good cash generator; gross cash flow is \$165 million (\$120 million of income and \$45 million in depreciation) and capital spending is \$45 million or so.

Like most food stocks, PT has been an uninspiring performer in the past couple of years; it is trading around \$17, versus a 1991 high of nearly \$24. But earnings have continued to rise moderately, despite a slowdown in unit growth in mid-FY 1992. The shares are now trading at about 15 times EPS for fiscal 1994 (ends June 30, 1994) so it is reasonably priced for a food company with strong brands and a growth rate of nearly 10%.

Who might buy Pet? One possibility is Heinz, whose ketchup is losing market share to salsa, which El Paso sells, and which could take Pet's brand to Europe and other offshore markets. Other possibilities include Quaker Oats, ConAgra, CPC, Unilever, BSN Group and Nestle. Like Gerber, Pet would be sold at a P/E of at least 20, suggesting a buyout price in mid-1994 of \$23, roughly a 40% premium to its recent price.

Health care: Biotechnology

Biotechnology consolidation

Many biotechnology firms will have to make strategic deals over the next few years. PaineWebber biotechnology analyst Linda Miller thinks these deals will be governed by three realities:

- Many firms in the industry are running short of funds.
- Business risks for biotechnology companies have grown because of the increasing cost consciousness of health care providers. In addition to demonstrating safety and efficacy, new products now must demonstrate cost effectiveness based on "outcomes research." This lengthens the time of product acceptance, if not regulatory approval; increases costs of running clinical trials; and raises the risk of new product failure.
- The best growth opportunities are innovative products that solve medical problems with new technological approaches. This is a plus for the industry, which has not tended to focus on "me-too drugs," whose commercial viability has faded as disinflation hit health care.

Let's take a closer look at these three trends:

Look Ma, no cash: Firms are running out of funds but finding ways to survive

More than 200 "biotechnology companies" are currently traded publicly, and at least another 1000 private firms are pursuing biotechnology opportunities. The capital markets will not be able to fund developments at all of these companies, given that the latest estimates of the cost of developing a successful new drug exceed \$200 million. If we assume just one drug developed at each of these 1200 firms, that is 1200 X \$200 million = \$240 billion, about equal to total U.S. aftertax corporate profits in 1992.

Based on figures available as of mid-1993, the industry was operating at an annualized loss rate of approximately \$1.2 billion. This reflected revenues annualizing at the rate of \$4.4 billion and expenses running at a rate of \$5.5 billion. The total cash and investments of the industry equaled \$6.4 billion at that time, giving the average biotechnology company approximately five years of life at

current rate of operations. However, more than 60 companies had a "survival time" of less than two years, indicating a pressing need to raise more capital, restructure, or arrange for funding by a corporate partner.

Is it really possible for companies that are short on cash, in an industry with difficult fundamentals, to raise more money? The experience of 1993 suggests that the surprising answer is: Yes. During 1993, despite the pall that descended on the health care sector, a number of deals were done that looked like this: Biotech firm X, which will run out of money in a couple of years and whose shares trade at \$10, goes to its principal institutional shareholders and sells them 2 million shares at \$8—a steep 20% discount to the market price. This new \$16 million in cash insures the company's survival for several more years. How does the stock price react to this dilutive equity issuance? The stock often goes up to, say, \$12 because the market is more favorably impressed by the reduction in financial risk than it is spooked by the dilution.

These deals demonstrate one very important point: The capital markets are quite generous with the biotech industry. Although it is under financial pressure, it probably will not precipitously run out of funds. In fact, more companies are likely to go public in coming years than disappear; three years from now we could well have significantly more public biotech companies than we have today. This is a negative for the most established firms, in the sense that they will not be able to win simply by surviving in an industry where their competitors are dropping like flies.

Pricing problems raise business risk, increase need for diversification

A few dozen biotechnology therapeutic products have been introduced commercially, and they share one characteristic: High price. Products such as interferons and blood cell growth factors used on a chronic care basis often cost patients thousands or tens of thousands of dollars annually for treatment. Other acute, one-time care products can also cost thousands of dollars per use. These costs reflect the high expense of product development, establishment of infrastructures of these new companies, high costs of manufacturing some products, and the need to provide a return to investors.

Currently, pricing in the U.S. remains less regulated than in several European countries, which have product pricing approval requirements. However, under the Clinton Health Plan, the proposed National Review Board and the Secretary of Health and Human Services together could serve as a de facto pricing board. Hopefully, the government will not attempt to solve America's health care "crisis" by making new drug development financially unattractive. This would save rather trivial amounts of money in the short run and prove very costly, from both a financial and quality-of-care perspective, in the long run. Good new drugs keep people out of hospitals, where most of America's health care dollars are spent.

In the future, pricing pressures are likely to *drive biotechnology companies to align with larger partners or raise sufficient capital to allow them to develop portfolios of products rather than develop as "one-product" companies*. As the harrowing experience of Centocor's Centoxin illustrated, a one product company can quickly become a no product company. This is something managements want to avoid.

Biotech's strength: Innovative products emphasis

The strength of the biotech sector is that it specializes in innovative approaches to developing new products. That is a plus in today's healthcare environment, where pricing power is poor for "me-too drugs." If they are well managed, small start-up biotech companies can use R&D resources more productively than large multinational companies because they enjoy advantages of rapid decision making with few layers of management, focused research efforts targeted to a few critical programs and higher compensation of key employees via stock incentives. Large drug companies with ample cash flows and meager new-drug pipelines obviously might be interested in buying into good biotech companies, as many firms have done in the past. Promising areas of technical innovation and companies pursuing those areas include:

- ***Drug design*** (Affymax, Agouron Pharmaceuticals, Arris Pharmaceuticals, Vertex Pharmaceuticals) design of new chemical entities that can "approximate" the activity of proteins used therapeutically, but have advantages over proteins in terms of oral versus injectable delivery, greater tolerance, potentially higher patient compliance with therapy and lower cost of manufacture;
- ***Gene regulation*** (Ligand Pharmaceuticals) redirection of the intracellular processing of information in the cell to alter or enhance a gene/receptor/cellular interaction;
- ***Gene therapy*** (Genetic Therapy, Somatix Therapy, Viagene, Vical) substitution of normal or novel genes to replace inappropriate genetic functions in patients;
- ***Neuroscience*** (Alkermes, Athena Neurosciences, Cambridge Neuroscience, Cephalon, Cocensys, CytoTherapeutics, Interneuron Pharmaceuticals, Neurex, Neurogen, Regeneron Pharmaceuticals) identification of novel growth factors, cell channels and receptors in the central nervous system and brain, which provide unique targets for product development in diseases including Alzheimer's, ALS and Parkinson's, among others;
- ***Transgenics*** (Genzyme Transgenics) utilization of animal models for production of unique therapeutic products, like alpha-1 antitrypsin or human monoclonal antibodies, or such animals as more predictive models of human disease and drug efficacy;
- ***Wound healing*** (Amylin Pharmaceuticals, Biomatrix, BioSurface Technology, Bio-Technology General, Celtrix Pharmaceuticals, Collagen, Creative Biomolecules, Curative Technology, Lifecore Biomedical, Organogenesis, ProCyte, Telios Pharmaceutical) identification of novel growth factors, which provide targets for drug development for treatment of conditions like skin ulcers; and,
- ***Vaccines*** (North American Vaccine, Univax Biologics) development of "preventative" medicines for children and adults, which can perhaps most cost effectively deal with major cases of infection and epidemics.
- ***Antisense*** (Genta, Gilead Sciences, Isis Pharmaceuticals) new chemical families that can target DNA and RNA molecules specifically and intervene in disease processes at an early stage;
- ***Cellular therapy*** (Advanced Tissue Sciences, Applied Immune Sciences, Cell Genesys, CellPro, Systemix) utilization of the cells' sophisticated machinery as the carrier of desired medications, including novel genes;

Four ways to consolidate

Those are the broad industry pressures. Linda Miller identifies four main ways for companies to respond to them:

1. Selling partial ownership

Firms with fairly strong product portfolios but not enough strength to go it alone might want to sell a large part—but not all—of their equity to a large health care company. The key is to preserve the small-company virtues of independence, strong incentives for key personnel, lean management, and an entrepreneurial spirit in order to avoid getting smothered by the bureaucracy of a big company. In the early 1980s many drug and chemical companies bought small biotech firms, and there have been three major deals more recently. Hoffmann-La Roche bought a controlling interest in Genentech when TPA hit the skids; this proved to be a smart move for Roche because Genentech's fundamentals have improved and the stock price has climbed. It demonstrates the ability of a smart corporate buyer with a long-term strategic view to find bargains among companies that are being valued in the stock market on their near-term prospects. Two other deals were American Home Products buying about two-thirds of Genetics Institute and American Cyanamid buying a controlling interest in Immunex. Other large firms with plenty of cash but product portfolio problems (of which there are quite a few) may well want to do similar deals.

2. Product-related deals

The industry's most successful 10-20 firms that have promising products in advanced clinical trials can try to sell rights to market individual products in certain markets. For example, Biogen has two products in advanced stages of clinical development (Hirulog and beta interferon), which it could license for commercialization across Europe and the Far East to a large drug company that already has a marketing infrastructure in place. This would save Biogen the expense and risk of building its own marketing infrastructure, allowing it to invest more in new products so that it has a better chance of developing a diversified product portfolio.

3. Sell the company

Like a firing squad, the prospect of running out of money in a couple of years concentrates the minds of biotech managements and directors alike, particularly because many of them own sizable equity stakes. One solution, which many firms are considering now, is simply to sell the entire company. From the standpoint of the buyer, there are a couple of problems with this, however. The acquired firm may lose its entrepreneurial edge after it is acquired, and the best people in the firm may walk out the door. (Even lock-up clauses for the key executives only last a couple of years.)

4. Mergers of equals

Two biotech companies of similar size and complementary product lines can simply merge, which will diversify the product line and generate savings in administrative overhead. The archetype here is the merger of Scios and Nova Pharmaceutical—which, unfortunately, reveals the weakness of mergers: The aggregate stock market value of the two companies dropped after it occurred. In essence, the deal pleased no one except management. Investors who liked Scios but not Nova did not want to be forced to own Nova; conversely those who preferred Nova did not wish to be saddled with Scios. And those who liked both already had the opportunity to own both. So although it reduced the business risk for managements (and, arguably, for investors in the two companies), the public stock market viewed it in a negative light.

One way to play biotech consolidation

How can investors benefit from these trends in biotech consolidation? Unlike most other industries discussed in this report, it makes more sense to use a shotgun than a rifle in selecting opportunities, because both investor psychology and the fundamentals of individual firms are exceedingly difficult to forecast. One group of stocks that might be attractive—those that:

- a. Are likely to run out of funds within two years and therefore are under pressure to make a strategic move, such as selling out or raising more capital;
- b. Possess relatively strong fundamentals; i.e., they have smart managements, good research capabilities and decent prospects of getting a good product out the door. Such companies are most attractive to a strategic buyer.

If such companies raise more capital, sell a partial equity stake, or sell out in toto, they are likely to be good stocks. And experience in the behavior of biotech stocks suggests that when one company does a deal, similar stocks will trade up in sympathy. Table 4 lists 23 firms that, in the opinion of Linda Miller, have these characteristics. If held for a two-year period, they could be strong performers. Needless to say, it is much safer to buy all 23 than to pick 1 or 2.

Table 4

Biotechnology firms that:

- a. Are at risk of running out of money within two years, and
 - b. Have reasonably strong fundamental prospects
- (Listed in order of financial burn rate, from shortest to longest; firms at top are forecast to require additional financing within one year, those at bottom within two years):

IG Labs
 Affymax
 Univax Biologics
 Cambridge Neurosciences
 Shamen Pharmaceuticals
 Repligen
 Gensia
 T-Cell Sciences
 ImmunoGen
 Cephalon
 Immunex
 Argus Pharmaceuticals
 Alkermes
 Amylin Pharmaceuticals
 Alpha-Beta Technology
 Ligand Pharmaceuticals
 Glycomed
 Cytel
 Magainin Pharmaceuticals
 Corvas Int'l
 Athena Neurosciences
 Cortech
 Isis Pharmaceuticals

Health care: HMOs

United Healthcare: Strategic asset for a major insurer

Whenever the fundamental economics of an industry change dramatically, acquisition activity is likely to speed up. President Clinton's mission to "reform" the health care industry has prompted just such action—witness the Merck-Medco Containment and Columbia-HCA deals. These mergers are likely to be only the beginning.

As the country shifts toward managed care, another health care sector ripe for consolidation is the HMO industry. Perhaps the biggest prize in the group is the company that has itself been the most active in recent years in acquiring HMOs—United Healthcare. There are several reasons to think acquisition activity in the HMO industry will increase:

- **First, the industry is more mature than it looks.** Although only one in five insured individuals currently belong to an HMO plan, fully one-third of the urban commercial insurance market are now members of HMO plans. In many parts of the country—i.e., California, Massachusetts and Minnesota—HMOs are already the dominant form of health care delivery.
- **Second, medical inflation is slowing dramatically and profit margins for the group are peaking.** To continue to produce strong gains in revenue and earnings, plans must focus more on expanding enrollments, which expands revenue while creating economies of scale. In the buy versus make decision, current economics and valuations clearly favor the former alternative. The stocks are attractively valued for a strategic buyer; they

trade around a market multiple despite double-digit secular growth rates. And today it takes about three years to build a profitable HMO—too long for a company that wants to expand its presence in the business rapidly.

- **Third**, whether or not President Clinton is successful in implementing his health care plan, one fact stands out: *The nation's move toward managed care will continue because it is cheaper than fee for service.*

In this environment, the logic of one HMO plan buying another to boost its own enrollment is clear. But what will be the response of all the large indemnity health insurance companies—such as Prudential and Aetna—that are rapidly losing market share as their fee for service enrollees shift to HMOs? Although most of the larger players have managed care businesses, few have critical mass or operations capable of absorbing their existing fee for service enrollments. In view of these trends, a sensible strategic move by an insurance company would be to buy the premier company in the HMO industry, a company that does business in 20 markets, and has a client list of over 20 million members. If Merck can buy Medco, why can't Prudential buy United Healthcare?

The acquisition of United Healthcare would catapult any secondary indemnity health insurance player into the big five, and would propel any one of the big five (CIGNA

Aetna, Prudential, Travelers and Met Life) into a new bracket unto itself. United owns ten plans outright with over a million members and manages another ten with over 925,000 enrollees. These plans are scattered throughout key Midwestern markets and, in most cases, are either the market leader or a major player.

These plans are not simply clones of a single strategy. Rather, they represent virtually every type of plan model (IPA, staff, etc.) and customer (commercial, Medicare, Medicaid). In addition to its 2 million members in managed care, the company provides one of five services (ranging from pharmacy management to organ donor services) to another 22 million Americans.

Another attraction of United Healthcare is its very able management team, which has been in the forefront of the managed care movement, not only aggressively building its enrollment, but also developing unique quality assurance and information systems products. So an insurer would be gaining a lot of extremely valuable management expertise and information technology, much as Merck did by buying Medco. With a market cap of approximately \$5.5 billion, United Healthcare would be an expensive acquisition for any suitor, but given current trends in health care, the price may look dirt cheap three years from now.

Health care: Hospital management

Restructuring National Medical Enterprises

Most health care companies have experienced choppy seas for the past two years, but National Medical Enterprises, a major hospital management company with sales of \$3.7 billion, has been hammered by a typhoon of bad news concerning lawsuits and government investigations, mostly focusing on its psychiatric hospitals. The stock has dropped from a 1991 high of \$26 to \$14, while EPS has declined by a third. But PaineWebber analyst Helen O'Donnell thinks the stock will head higher from here as new management successfully restructures and positions the company for a managed care environment.

Table 5

National Medical Enterprises, Inc.

Divisional breakdown for FY93 (ended May 31, 1993)

Dollars in millions

	Revenues	Operating profit*	Operating margin
General hospitals	\$2,350	\$295	12.6%
Rehabilitation hospitals	600	61	10.2%
Psychiatric hospitals	600	3	0.5%
Lease and other income	212	54	25.3%
Total	\$3,762	\$413	11.0%

*Operating profits are before interest expense, investment earnings, (gain) loss on disposal of facilities and divestiture/unusual litigation expenses.

NME gets 63% of its revenues from general hospitals and 16% each from rehabilitation hospitals and psychiatric hospitals (Table 5). The company has been thrown into a crisis because of several lawsuits by insurance companies alleging fraudulent practices and overcharges and a Federal

probe of the psychiatric unit. These problems, plus a slowdown in its rehabilitation operations, have caused EPS to drop from \$1.54 in fiscal 1991 to \$0.91 in fiscal 1993. But now, Helen thinks, most of the bad news is out and there is ample evidence that the company is getting serious about reforming itself:

- A major overhaul of the board of directors; seven former directors have left.
- Hiring of a new chairman, Jeffrey Barbakow, who has an investment banking background. He has a mandate to clean up the problems in the psych hospitals and improve shareholder value.
- Settlement of large lawsuits by two insurers and the establishment of a reserve for a third suit and other civil litigation for a total of \$250 million.
- Sale of 28 rehab hospitals and 45 outpatient rehab clinics to Healthsouth for \$300 million in cash.
- The recent signing of a bank agreement that alleviates concern over the rollover of a line of credit to a term loan.
- Suspension of the dividend last fall.

Despite its problems, the company has maintained a decent balance sheet and positive cash flow. Cash flow (i.e., earnings before depreciation, interest, taxes and amortization) was \$475 million in fiscal '93, and Helen estimates cash flow of \$524 million for fiscal '94. NME intends to sell less profitable hospitals, cut costs and focus the company on its successful acute care hospitals.

If it is successful, earnings power by 1995 would be \$1.20. With its legal problems behind it and a growth rate of 12% plausible, the P/E could well be 12, implying a stock price in the mid-teens, well above the current price of \$11 1/2. With the company yet to reach a settlement with the Federal government, clearly this is not a stock for widows and orphans, but the upside potential is significant.

Asset sales: psych hospitals, other assets to go

While the Federal investigation of NME's psychiatric division remains a serious concern, the company's recent reserve for its remaining civil litigation paves the way for a more aggressive restructuring effort by management. NME has sold most of its rehab hospitals; it will sell some of its general hospitals, nearly all of its psychiatric hospitals and some other assets. These could net \$600 million, which could be used to pay down debt. Let's take a closer look at the company's segments and how they would be managed:

General hospitals. Most would be kept and would constitute the core of NME. Last year they accounted for \$2.35 billion in revenues and \$295 million in operating profits. In fiscal 1993, NME operated 35 domestic general hospitals: mostly in California, Florida, Louisiana and Texas. Several of them could be sold, especially those in Florida, an attractive market because it is growing. Longer term, NME will also add facilities in markets where it wants to build market share. NME also has a dozen general hospitals overseas, which generated \$41 million in operating profits in fiscal '93. Most of these are likely to be kept.

Rehabilitation hospitals. Rehab hospitals treat patients who have suffered serious illness or injury and need comprehensive rehabilitation (such as physical or occupational therapy) to regain functional abilities. This segment includes 35 rehabilitation hospitals, 43 satellite outpatient centers and about 15 sub acute units. While it has been successful, it has been hurt by industry pressures and management's focus on the psych segment's problems over the past two years. Nevertheless, most of the hospitals were recently sold at a fairly attractive price.

Psychiatric hospitals. This division, which has 61 hospitals, is barely profitable because of industry pressures, numerous lawsuits and negative publicity. The bulk of these facilities are likely to be sold or closed, resulting in additional writedowns. The psych division could also be spun off to shareholders after some resolution of the Justice Department investigation, but this option is less appealing to management as it does not raise cash for other purposes.

Other assets. Additional asset sales could include NME's interests in Hillhaven (formerly its skilled nursing subsidiary and now a separate public company), its ownership in Westminster (a U.K.-based skilled nursing company) and its Medical Ambulatory Care, Inc. dialysis subsidiary. These assets could raise approximately \$630 million.

Cost cutting

During 1993, NME began to reduce variable costs at its psychiatric and rehabilitation facilities, largely by streamlining treatment programs as payors cut reimbursement levels. In April, NME initiated an overhead reduction program designed to save \$20 million annually—a figure that will be exceeded. This program included the merging of the rehab and general hospital divisions and reducing headcount by 1,000.

More cost-cutting is likely, both in corporate spending and at the facility level. Some reductions may be achieved in conjunction with asset sales. Costs will be cut in on-

going operations through more efficient labor scheduling, better purchasing and further headcount reductions. Salary increases will be minimized and there will be meager growth in pharmaceutical and hospital supply costs; many firms in these sectors are hungry for business and ready to deal.

Cash is king

NME has announced reserves of \$250 million to settle civil litigation associated with its psychiatric operations. Some further financial settlement appears likely at some point in the future, as a result of the Justice Department investigation. That's the bad news. The good news is that NME has enough cash for the civil settlements and continues to have strong cash flow. As of August 31, 1993, the company's cash and short-term investments amounted to \$264 million. Cash flow from operations in the first quarter was \$79 million; management estimates that cash flow from operations will cover its scheduled 1994 debt maturities and payments for the insurance litigation. NME is also expected to pare its capital spending from \$322 million in fiscal 1993 to \$225 in fiscal '94, if not lower.

The new NME

Table 6 outlines the shape of the "new" NME, which will consist primarily of general hospitals and some rehabilitation operations. It is based on the following assumptions:

- The general hospitals are unchanged (although some sales or purchases are possible).

Table 6

Pro forma assumptions for new company

Dollars in millions, except per share

	Annualized projections
Revenues	\$2,715
Operating profit	329
Investment earnings	25
Interest expense	45
Pretax income	309
Tax rate at 41%	127
Net income	182
Average shares outstanding	166
EPS	\$1.10

- Margins in both general and rehab facilities are slightly higher, reflecting cost cutting and a better mix of facilities in the rehab group.
- Asset sales and cash inflows (including the contribution of \$135 million from Hillhaven in the current quarter and sales of assets) raise at least \$500 million, which is used for debt reduction.
- The psychiatric hospital group is sold or shut down.

The asset sale/cash inflow estimates used in Table 6 are not aggressive, given that NME's holdings in Hillhaven, Westminster and Medical Ambulatory Care, Inc. alone could be worth over \$600 million. Furthermore, this projection essentially places no value on any of the psychiatric or rehabilitation hospitals to be sold, which is too conservative. Helen believes the company would be able to use existing cash to pay the civil litigation, while additional cash flow derived from asset sales or borrowings could be used in any government settlement that might be reached. Cash flow from operations should be adequate to cover debt payments and capital spending.

Health care: Medical technology

Buying health care R&D in the stock market

As large health care firms contemplate the 1990s, they know that major customers such as HMOs and state Medicaid programs have become much tougher. They will not pay premium prices for "me-too products" that are not clearly more beneficial than similar but cheaper products. Because these powerful customers are becoming a bigger share of the total market, they are "commoditizing" the market for medical supplies.

Large firms that want to grow in the age of commoditization must sell innovative products that are clearly better than what is already on the market. Such products will enjoy both strong unit growth and high profit margins. In this context, "better" might mean "cheaper" or "more effective." In practice, these two virtues often go together because more effective treatments will tend to keep patients out of hospitals and doctors' offices, where most of the U.S. health care dollar is spent. New modes of treatment that are faster or more mobile—permitting use in clinics and doctors' offices rather than hospitals—like-

wise tend to both improve the quality of care and reduce costs because they speed up treatment.

The growing pressure on big health care firms to sell innovative products might suggest that R&D budgets should be increased. Perhaps they will be. Unfortunately R&D spending is similar to advertising spending, of which retailer Sam Wanamaker supposedly said, "I know that half of my advertising expenditures go to waste. I just don't know which half." Probably 80% of health care R&D is wasted, but you don't know which 80% until after it is spent. The drug industry already spends huge sums on R&D—over \$1 billion annually is spent by several of the largest companies—but the product payoff can be meager and unpredictable, with companies hitting protracted "dry spells." Even mighty Merck will see several major drugs go off patent in the late 1990s, with no real blockbuster drugs to replace them.

Given these trends, it makes sense for large health care companies to invest some of their still-ample cash flow in small companies that have *already developed promising products that are approved by the FDA or are in advanced clinical trials* and serve relatively large markets. Arguably, this is a quicker, less risky way to develop new products than hiring ten more Ph.D.s, buying them a lab and waiting five years.

It is also relatively cheap because today such companies are readily available at attractive prices. Over the past 15 years, Wall Street has bankrolled dozens of health care start-ups, but today many development stage companies are selling 30-50% below their (admittedly excessive) 24-month highs. Conversely, it makes sense for the small companies to sell out because they need not only capital to finance R&D but *large, experienced sales forces* to market their products throughout the world. One recent deal along these lines: CellPro formed a strategic alliance with Corange, the parent company of Boehringer Mannheim, which may provide up to a \$220 million investment in CellPro and access to Corange's research and marketing infrastructure.

Advanced Magnetics

One company that would be an attractive acquisition is Advanced Magnetics, which is a leader in the development of biopharmaceutical products based on its proprietary colloidal super paramagnetic particle technology. This technology has broad applicability in the diagnosis of cancer and other diseases, drug delivery and cell separation systems. AVM's primary focus has been on the development of iron-based biopharmaceutical magnetic resonance

imaging (MRI) contrast agents designed to enhance images of the abdomen, the liver and the lymphatic system.

MRIs are large, expensive pieces of equipment, costing approximately \$1.5-3.0 million. MRI technology is non-invasive, does not use radiation and generally provides better images of the structure of soft tissue than X-rays or CT scans. There are an estimated 4000 MRI machines installed worldwide. AVM's contrast agents will make MRIs more cost effective by broadening MRI's area of application and improving the diagnostic quality of MRI. Enhanced image quality is especially important, since the liver and lymphatic system are among the most common sites for metastatic tumors to appear. For example, this technology would enable doctors to identify a tumor in the liver while it was still small and nearly impossible to detect without exploratory surgery.

AVM has been developing this technology for over a decade; the key scientists have been working with founder Jerry Goldstein since the mid-1970s. The company, which reported annual revenues of just \$8.9 million and net loss per share of \$0.36 in fiscal 1993 (ended September 30), is very prudently managed from a financial standpoint and has approximately \$36 million in cash. With pharmaceutical product sales beginning in Europe and New Drug Applications (NDAs) for their lead products (ferumoxsil for marking the bowel and feridex for imaging the liver) to be filed with the FDA within six months, AVM should be a key player in the market for MRI contrast agents.

AVM announced the FDA submission of its gastrointestinal agent, ferumoxsil in November 1993. Pending FDA approval it should introduce ferumoxsil and feridex in 1995-1996. If AVM stays on plan, by 1995 or 1996 it should be selling two important products in the U.S. and abroad; by 1997-1998 sales should be more than \$100 million, with ample potential for further growth.

AVM has already established strategic alliances with a number of major pharmaceutical firms—specifically, Squibb Diagnostics (division of Bristol-Myers Squibb), Mallenckrodt Medical (division of IMCERA Corp.), Sterling Winthrop Pharmaceuticals, Guerbet S.A. (a leading European producer of contrast agents), and Eiken Chemical Co., Ltd. of Tokyo. These companies have identified AVM as a technological leader in this field. Any of them might want to make a bid for Advanced Magnetics, which would give them exclusive control of a pipeline of patented products that target a potential market estimated at more than \$1.0 billion worldwide. With 6.7 million shares outstanding, a plausible selling price would be \$20-30 per share, implying a cost of \$130-200 million.

Biomagnetic Technologies, Inc.

Biomagnetic Technologies pioneered the field of magnetic source imaging (MSI) technology over the last 20 years and is the only company that has sold a commercial MSI product. Its technology is proprietary with broad patent protection. This revolutionary technology targets a potential market in excess of \$1.0 billion.

BTI's product, the Magnes system, which has received FDA clearance, incorporates MSI technology to non invasively localize the sources of bioelectrical activity generated by the brain and heart. Unlike other technologies, such as MRI or CAT scanners, MSI does not provide a picture of the tissue itself but rather provides information about the function of the tissue.

Most debilitating disorders of the brain and heart are associated with abnormal bioelectrical functions that produce correspondingly abnormal magnetic field patterns. The Magnes system can "read" these patterns to help locate functionally impaired tissue. In addition, MSI is able to identify the specific functions (e.g., vision, smell, voluntary movement) that are carried out in certain regions of the brain. This information helps brain surgeons distinguish between critical and non-critical brain tissue when, for example, they are excising a tumor.

At present, MSI is being used to locate the motor and somatosensory areas for planning brain surgery. Other potential brain applications for MSI include localizing epileptic activity, detecting pre-stroke symptoms of transient attacks, planning treatment for stroke, and assessing head injury.

BTI's technology is far preferable to existing alternatives. For example, to analyze a patient with severe epilepsy doctors must now open the skull and introduce sensors for days at a time. The Magnes System, consists of a bed in a shielded room, and a device that is lowered over the patient's head to pick up electro-magnetic signals. The system is expensive, costing \$2.5 million a copy. Nevertheless 12 such systems have been sold, including one recently to a major neurology center in Japan, which bought it for clinical rather research purposes. Other sales are pending. Sales should improve as the cost comes down through re engineering, and as studies are conducted in clinical centers that demonstrate the system's cost effectiveness. The estimated worldwide number of major epilepsy centers and teaching centers is 500.

BTI had \$7.0 million in cash and no debt (as of June 30, 1993). Tina Rizopoulos estimates revenues of \$4.4 million and a net loss per share of \$1.12 for fiscal 1993 (ended September 30), and for fiscal 1994 revenues of \$8.6 mil-

lion and net loss per share of \$0.82. Over the last year the stock has been as high as \$11. A buyer would probably have to pay in excess of \$10 per share to acquire it at the present time. Potential acquirers of BTI would include the big players in the medical diagnostic equipment field, including Siemens, General Electric, Phillips and Toshiba.

i-STAT

i-STAT Corporation manufactures medical diagnostic products for blood analysis that provide accurate and immediate results at the point of patient care. It has developed the world's first handheld automated blood analyzer capable of performing a panel of tests on two drops of blood in 90 seconds at the patient's side. Over the long term such equipment will be widely adopted because it improves patient care and reduces costs. It provides doctors with virtually "real time" information on the status of a patient's blood. Therefore patients can be processed through a hospital more quickly, and hospitals can reduce the resources—both personnel and instrumentation—devoted to clinical laboratories.

The company's first product, called the Portable Clinical Analyzer, is a handheld device that employs single-use, disposable cartridges to simultaneously perform a number of commonly ordered blood tests. i-STAT has been marketing this product, which is FDA approved, since September 1992. Thus far only six tests (sodium, potassium, chloride, glucose, urea nitrogen and hematocrit) have been approved, but during 1994, the company plans to expand the testing capabilities by introducing cartridges for additional tests, such as blood gases. The tests approved thus far target a market of \$500 million; other products that are under development target another \$500 million in the U.S. alone.

i-STAT's near-term strategy is to further penetrate the critical care departments of U.S. hospitals, particularly the emergency departments, where the highest volume of stat blood tests are performed. The company is expanding its manufacturing and marketing capabilities; it now has a direct sales force of 21 sales representatives. The company's longer-term strategy is to penetrate alternate site markets such as outpatient clinics, freestanding dialysis centers, nursing homes and physicians' offices.

i-STAT's sales are affected principally by the number of hospitals using its system and the rate at which i-STAT's disposable cartridges (the "razor blade" part of the business) are used by these hospitals. At the end of 1993's third quarter, i-STAT had signed contracts with 165 hospitals, of which about half have gone through the validation and implementation phase and are using the car-

tridges on a continuous basis. The intensity of cartridge utilization is rising in some hospitals as the number of departments using the system increases. As the installed base expands and cartridge utilization increases, profit margins should expand. Tina Rizopolous estimates 1993 revenues of \$5 million and a net loss per share of \$2.00-2.10; in 1994 revenues should reach \$15 million, with losses of \$1.30-1.40 per share.

i-STAT completed its initial public offering on March 4, 1992 at a price of \$18 1/2 and is trading at around \$15. The stock has been as low as \$8. Management would likely not sell the company until its products are better established commercially. Potential buyers would principally be manufacturers of blood analysis equipment such as Abbott, Baxter, DuPont and Eastman Kodak, which, to our knowledge, do not have development programs for point of care blood analysis systems.

Health care: Pharmaceuticals

Warner-Lambert: Cutting costs, going with its strength

Not unlike Varian—the “semiconductor company” that gets 62% of its earnings from health care—Warner-Lambert is poorly understood by Wall Street. The company is followed by pharmaceutical analysts, who focus on the progress of its ethical drug business—even though this business accounts for only 41% of sales and 62% of operating profits. Warner-Lambert’s other businesses are OTC drugs, candy and consumer products such as Schick razors and Listerine. Furthermore, WLA has made a shrewd strategic move that will make *OTC drugs, not ethical drugs* its main engine of growth in the future. As this fact is better appreciated, and the benefits of cost-cutting take hold, WLA shares should be a good performer in 1994.

WLA’s 1992 structure

	Revenue \$ bil.	Op. profits \$ mil.	Op. margin
Pharmaceutical	\$2.28	\$842	36.9%
Confectionery	1.19	227	19.1
Consumer health care (OTC drugs, Roloids, Listerine, shaving products)	2.13	459	21.6

The pharmaceutical business: Not bad

Analysts tend to focus on just the first of these businesses, and lately they have been understandably concerned that profits generated by the pharmaceutical division would be poor because Lopid, the big-selling anti-cholesterol agent, went off patent at the beginning of 1993. What will take Lopid’s place? The most obvious candidate is Cognex, WLA’s news-making treatment for Alzheimer’s disease,

and analysts have been scrutinizing its sales results on a weekly basis.

The position of PaineWebber pharmaceutical analyst Ron Nordmann is that, despite the loss of Lopid, the pharmaceutical business will hold up well. His reasoning is that even if it is not a blockbuster, Cognex will produce \$150 million in sales in 1994; it is off to a reasonably good start and is the only treatment for a severe disease that afflicts about ten million people in the developed world. Furthermore, WLA will soon get approval for another important drug, Neurontin, an anti-epilepsy medication. And Accupril, an ACE inhibitor recently approved for the additional indication of congestive heart failure, has the potential to become the company’s largest selling prescription drug. These drugs will be big enough to more than make up for the loss of Lopid.

A wise strategic action: WLA goes with its strength

Evidently earlier this year Warner-Lambert’s top management concluded that, in view of the disinflationary trends buffeting the ethical drug business, it made sense for the company to focus more resources on a traditional area of strength for the company: OTC drugs. Then Warner-Lambert leveraged its strength in this business by going out and making a great deal. WLA formed a joint venture with Burroughs Wellcome, the U.K. pharmaceutical house, to create a company called Warner-Wellcome Consumer Health Products. Both companies will put their current and future OTC drugs in the business. Warner-Lambert will be the managing partner of the alliance, with day-to-day operating responsibilities, and will have four of the seven board seats. Initial sales of the venture are about \$1.6 billion.

At birth, Warner-Wellcome will be the third largest OTC business in the world. But two drugs should make it the world's largest in a few years. In late 1995 it is expected to launch OTC versions of Zovirax, the anti-viral agent used for treating herpes. Zovirax is the eighth largest selling prescription drug in the world with annual sales of more than \$1 billion. Second, pursuant to a deal with Glaxo, OTC Zantac—the anti-ulcerant that is the largest selling drug in the world—is expected to be launched in 1996-97. Warner-Wellcome should be a major source of growth for WLA in the future, but it is getting somewhat limited attention from the stock market.

Cost-cutting: WLA is ahead of the game

In 1991, well before it was fashionable in the drug industry, Warner-Lambert took a major write-off of \$418 million aftertax, primarily to rationalize manufacturing facilities and globalize lines of business. It shut down 20 manufacturing facilities; management estimated that it would save \$1 billion over seven years. Then in November 1993 WLA took a second, somewhat smaller write-off of \$327 aftertax, which was more focused on cutting personnel rather than buildings. Management has not disclosed the cost-savings that this move should generate, but they

are believed to be fairly close to those generated by the first write-off. In addition to this, the company is likely to pare back R&D spending somewhat.

In sum, Warner-Lambert has:

- A pharmaceutical division that will do better than many observers believe.
- An OTC drug business that is already very strong and will become a global powerhouse selling the largest and eighth-largest drugs in the world.
- A consumer products business that has many globally powerful brands, including Schick, Trident, Dentyne, Halls, Listerine, Chiclets, Certs and Roloids. Once investors conclude that the “death of brands” is not imminent, they will place a higher value on them.
- A management that has shown itself to be highly proactive in making aggressive strategic moves—as evidenced by both the Warner-Wellcome deal and two write-offs—designed to maintain earnings growth in a tough environment.
- By virtue of these actions, an earnings growth rate of 13%, which is high for a company with a P/E of 12 on 1994 earnings.

Health care: Pharmaceuticals—Generic

Generic drug stocks: Risky play on drug industry restructuring

The U.S. pharmaceutical industry is experiencing the most dramatic change in its history driven by:

- Increased competition and reduced pricing power resulting from the accelerated shift to a “managed care” approach to health care delivery. Increasingly drug companies are selling drugs not to individual doctors but to powerful, highly price-sensitive buyers such as HMOs, PPOs, state Medicaid programs, hospital formularies, etc. The new buyers wear suits rather than lab coats, and low cost is a top priority. They demand and receive discounts and rebates for quantity purchases of drugs.
- The threat of health care reform legislation recently introduced by the Clinton Administration.

These sweeping changes will make it tough for drug companies to sustain above-average earnings growth. The net

impact of health care reform is difficult to gauge, because the President's reform plan affects the drug industry in many different ways, and many of its proposals will probably not become law. The current draft offers increased pharmaceutical benefits to about 70 million Americans through universal coverage and an outpatient drug benefit for Medicare patients, but the threat of additional government controls weighs heavily on drug industry managers.

The generic Rx for what ails the big drug companies

Pharmaceutical companies are scrambling to adapt to this challenging environment. Several seem to be in almost a panic mode. In 1993 there was turnover in the top management of such major firms as Merck, Glaxo, Lilly, Upjohn and Marion Merrell Dow. The controversial acquisition of Medco Containment Services by Merck is the boldest move to date to reposition a major company in the changing environment for health care delivery.

Many investors believe that the most logical strategic move for drug companies is to expand into the generic drug arena. Generic drugs are almost always lower priced, equivalent to the original patented product and more attractive to the "price sensitive" buyer. PaineWebber pharmaceutical analyst Ron Nordmann calculates that existing drugs with aggregate terminal year sales of \$32 billion will experience patent expirations by the year 2000. Many of the innovative companies have already adopted the practice of introducing generic versions of their older pharmaceuticals several months before their patents expire in order to blunt future competition from the dedicated generic drug companies, which are generally smaller than the research-based firms.

There are several examples where this strategy has been effective. History teaches us that the first generic entrant tends to maintain the lion's share of the market for an off-patent drug, even after several additional generic versions have been approved and marketed.

Excess capacity facilitates the move into generics

Research-based pharmaceutical companies are now in a restructuring and downsizing mode. Because they have bloated sales forces and too many manufacturing and distribution facilities, most large, innovative drug companies are well positioned to expand into the generic drug area. With an abundance of fixed assets in place, they can move aggressively into the generic drug area without excessive capital investment. The list of research-based companies that have already entered this field is impressive and includes Merck (West Point Pharma), Warner-Lambert (Warner-Chilcott), American Cyanamid (Lederle Standard), Ciba-Geigy (Geneva), Syntex (Hamilton), Upjohn (Greenstone) and Marion Merrell Dow (Rugby and Blue Ridge Labs). This strategy makes sense because managed care buyers are seeking less expensive, broad product lines from drug manufacturers in an attempt to reduce costs and enhance opportunities for "one-stop shopping."

No compelling reason to buy rather than build

Investors have bid up the prices of many generic drug company stocks in the past year to extraordinary levels (Table 7). This "feeding frenzy" has been encouraged by indications that generic drug companies have had discussions with major, research-based manufacturers. Ironically, the better-positioned generic drug stocks are currently selling at more reasonable valuations, in the judgment of Ron Nordmann.

Table 7
Valuation parameters of generic drug stocks

	Revenues 1992 (\$ mil)	Market cap (\$ mil)	Market Cap/Rev	P/E 1993
A.L. Labs	295.1	285.1	1.0	33
Alza	250.2	1,966.8	7.9	31
Barr Labs	58.1	172.8	3.0	222
Biocraft	126.2	296.2	2.3	22
Copley	52.0	705.9	13.6	39
Duramed	16.7	36.3	2.2	na
Elan	135.8	1,193.0	8.8	29
Forest	296.4	1,899.7	6.4	25
Halsey Drug	49.9	35.5	0.7	26
IVAX	451.0	1,772.4	3.9	22
Marsam	16.7	219.7	13.2	133
Mylan	212.0	1,917.4	9.0	23
Pharma. Resources	52.5	219.1	4.2	40
Purepac	70.5	231.5	3.3	27
Scherer	398.0	815.0	2.0	25
Teva	396.3	1,487.6	3.8	26
Watson	34.7	408.4	11.8	35
Zenith	59.4	336.6	5.7	28

For the reasons discussed above, many research-based companies will indeed become more aggressive in the generic area over the next few years. And no doubt many large companies are currently going through the classic "build or buy" analysis process. However, the only reason to buy a dedicated generic company at this time is for its "pipeline" of filed abbreviated new drug applications (ANDAs). Since it takes an average of 24 months to get an ANDA approved following its filing, a research-based company might buy a small, dedicated generic company to get a jump on the large number of major commercial winners that are currently experiencing patent expirations.

But this is a very short-term strategy with a limited payback potential. It does not make sense to pay 40-100 times earnings to buy one of the several public generic drug stocks listed in Table 7 that have already run up in price, are not uniquely positioned with their current product lines, but have an extensive backlog of filed ANDAs. Most of these companies currently produce generic drugs that are easily copied by peer organizations. Consequently, prices for their products tend to fall rapidly following the marketing of identical competitive compounds. Thus, the ANDAs really are not worth that much.

This was PaineWebber's view several month ago when Hoechst (Germany) bid 21 times sales and 60 times earnings for a 51% ownership position in Copley Pharmaceutical. This is one of several examples of a management rushing to reposition its company without regard to price.

Evidently other generic companies have been bid up on the theory that they are the “next Copley.”

But if the next Copley never materializes—if some of the other more poorly-positioned generic drug companies are not acquired in the next six months—their stock prices could fall dramatically. The stocks that appear to be most risky are Barr Labs, Biocraft, Marsam, Pharmaceutical Resources, Purepac, Watson and Zenith.

Big drug firms will dominate the generic sector by building, not buying

In the end, the large, research-based companies are likely to dominate the generic drug industry by building rather than buying. Their resources (scientific, manufacturing, distribution, technical, financial, etc.) are endless compared with most small, dedicated generic drug companies. Do investors really believe that a well prepared ANDA from Merck's West Point Pharma with every “i” dotted and every “t” crossed is not going to get priority attention from the Generic Drugs Division of the Food and Drug Administration?

Also questionable is the argument put forth by some analysts that the research-based companies just don't have the mentality to participate at the lower end of the market. These are difficult times for the large companies, and they know it. They will do whatever is necessary to find new

sources of revenue and profits. Many firms have already announced restructuring programs that include sizable headcount reductions. The acquisition of Medco by Merck proves that major drug companies are willing to “mix cultures” and forge into unfamiliar businesses in order to prosper.

Generic companies with unique capabilities are well positioned

There are companies with generic exposure that do make investment sense in this environment. They tend, however, to bring additional features to the party such as a position in difficult-to-manufacture generics and/or advanced drug delivery capabilities. Companies such as Alza, Elan, Forest and Scherer have unique drug delivery capabilities that enhance the utilization of many patent-expired drugs. In the past, they have contracted out their technologies to the research-based companies to generate revenues, but each is beginning to develop generic drugs in innovative drug delivery systems for their own accounts. Still other companies such as Mylan Laboratories, IVAX and A.L. Labs have innovative, patented products under development in addition to their drug delivery capabilities and generic portfolios. Ron Nordmann believes that such companies are much better positioned to survive and prosper in the rapidly changing world of health care delivery.

Household products

Procter & Gamble

Although P&G is usually thought of as a conservative company, the fact is that over the past few years P&G has shown itself to be one of the most pro-active consumer nondurable companies in the world. With revenues of \$30 billion, P&G has enough market clout to be a leader rather than a follower, and that is precisely what it has been.

EDLP: right strategy for the 1990s

Since 1991, P&G has been implementing the far-sighted strategic action of converting its business to everyday low pricing, or EDLP. Under the current system of high/low pricing, manufacturers such as P&G and Colgate-Palmolive periodically offer to sell, say, detergent to

grocery chains at a steep discount. The chains purchase huge quantities, some of which is either:

- warehoused to be sold later by the grocery chain or
- surreptitiously sold to a “diverter,” who will sell truckloads of the cheap Tide to other chains.

P&G complains that this system leads to production inefficiencies because of uneven order flow, excessive inventories in the distribution pipeline and employment of extra brand managers to plot pricing strategy. P&G also dislikes high/low pricing because it tends to focus the trade's attention on price rather than the inherent strength of the brand, which obviously works against a company like P&G with many very strong brands.

By shifting to EDLP, P&G intends to raise its gross margin as production costs decline (something that is already

happening) and boost its market share by improving the value to the consumer. This strategy is precisely in tune with the consumer environment of the 1990s, when consumers are willing to buy national brands only if they are priced competitively with private label. In 73% of brands where EDLP has been adopted, P&G's average retail price is down compared to the month of implementation of value pricing.

Although it made sense, the shift to EDLP was not without risk, because retailers preferred the current system and gave extra shelf-space to P&G's competitors that continued to offer products on deal. Indeed, in many product categories market share is below the level when value pricing was started. But because it is in tune with the times, EDLP is catching on; 14 of the top 20 retailers use some type of value pricing, as do more and more packaged goods companies.

A successful strategy

Despite the risk, EDLP appears to be working. Earnings results for the first quarter of fiscal 1994 showed that P&G was gaining share versus competitors, with its share up in 80% of overseas categories and 67% of U.S. categories. Its unit growth outstrips Colgate's by a considerable margin in all major regions.

Cost-cutting and stream-lining

Since the whole thrust of EDLP is to improve value for the consumer while cutting costs, P&G has been aggressively taking costs out of the system. It is eliminating unnecessary SKUs to streamline manufacturing and distri-

bution. It plans to close more than two dozen plants worldwide, reducing capacity by at least 20% and possibly adding 2+ percentage points to P&G's gross margin over the next several years. It plans to cut headcount by 12%. To account for these cost-cutting actions, since mid-1992 P&G has taken two write-offs with an aftertax value of about \$1.75 billion. In addition to cutting costs, P&G has been trimming weak businesses from its portfolio of businesses including an Italian coffee business, pulp and timber properties, and fruit juice processing operations.

Pushing overseas growth

Meanwhile, through a variety of acquisitions and initiatives P&G is aggressively expanding overseas, where it already generates more than 20% of earnings. In recent months it has rolled out Pampers Trainers in several European countries; purchased a Scandinavian health products firm and purchased an Italian subsidiary of SmithKline Beecham; announced plans to open a \$60 million diaper plant near Warsaw; and, acquired a major German paper products company. P&G is also making a major push into China, where millions of newly middle-class consumers are just learning the virtues of modern household conveniences.

Double-digit growth

P&G's gutsy strategy should give it 13% earnings growth driven by lower costs, rising market share derived from giving the consumer better value and strong growth overseas. If this growth rate is right, the stock is cheap and should be a good performer over the next couple of years.

Machinery

Top-line growth through acquisitions

How to get top line growth? That will be the key issue for industrial companies in the mid-1990s, in the judgment of PaineWebber machinery analyst Eli Lustgarten. To be sure, in the near term industrial earnings will continue to benefit from a number of positive factors besides top-line growth. Probably most important are internally driven improvements, reflecting nearly a decade of intense cost reduction. The cost-cutting culture has contributed to a view by portfolio managers that industrial stocks are a safe haven, particularly in comparison to such tarnished

"growth" sectors as health care, tobacco, food and household products.

Other factors that are boosting machinery profits in the near term are:

- An improving domestic economy.
- Virtually no inflation in the price of metals and other materials.
- Very favorable currency trends (notably a strong yen).

- Somewhat better prices. (But this appears to be “survival pricing”—i.e., adjusting prices to insure sector profitability at current demand levels).

It will be at least a year before we will know how sustainable these bullish factors are. More specifically, will they outweigh bearish factors such as moderate economic growth in the U.S., a likely modest economic pick-up in Europe and Japan and the continuation of limited pricing power?

Required earnings performance

Over the past three years, machinery stocks have appreciated roughly 70%. Given this run-up, investors and managements both realize that we are entering a period of *required earnings performance*. The key investment question concerning the industrial sector is whether it can deliver earnings over the next 12-24 months that will justify stock price gains above current levels, which are already rather lofty. Mindful of the industry's tough operating environment, machinery companies have been taking steps to insure that earnings expectations for mid-decade are realistic. Many companies advised investors in the fall of 1993 that the earnings outlook for 1994 was, in essence, “Better, but we don't know how much better.” Signals more or less to that effect were sent by Caterpillar, Ingersoll-Rand, Parker-Hannifin, Deere, Tenneco, Giddings & Lewis and Sundstrand.

While profitability has recovered from recessionary levels, Eli Lustgarten's projections through 1994 suggest that at least half, if not more, of the companies he covers will not see their earnings rise to their highest levels of the last five years. Judging from the level of stock prices, it also appears that many investors are hoping for a breakout of industrial earnings by mid-decade. The dilemma facing companies is how to deliver the expected earnings performance.

The case for acquisitions

The only way for machinery companies to meet the market's expectations for EPS growth is to achieve top line growth. But this is tough to get in the absence of a worldwide economic recovery. Therefore companies are likely to turn to an alternative strategy—acquisitions. Most industrial companies serve mature markets that at best will grow as fast as GDP. The restructuring efforts of the 1980s/1990s have left most companies with very strong balance sheets and, hence, the ability to borrow to finance an acquisition. Further, recent tax law changes have made goodwill tax deductible in certain types of transactions, which also facilitates acquisitions. Finally, interest rates are likely to remain reasonably low. Given

these three factors, many of the major industrial companies are looking for something to buy.

Hot IPO market creates tough competition for corporate buyers

For companies hunting for acquisitions, the major competition is the strong initial public offering (IPO) market. The current strong investor appetite for new issues has often made the public price for a company higher than the private market value. Cooper Industries took advantage of this phenomenon with its recent sale of its Belden subsidiary to the public; clearly the stock market was willing to pay more than were private buyers. Significantly, even though Cooper clearly indicates that it is searching for acquisitions, probably in the \$500 million to \$1 billion range or more, the company has initially committed the proceeds received from the Belden transaction toward a \$300 million stock buyback. This is the first stock repurchase program of size for CBE and is likely to be implemented because of the company's difficulty, for now, in competing with the IPO market for acquisitions. Although it is not certain exactly when, this new issues boom will eventually come to an end, making acquisitions cheaper.

Three types of acquisitions

What we have been seeing recently in the industrial sector are three types of acquisitions:

Bolt on acquisitions. For example Allied-Signal recently announced three product line additions—the Sundstrand Data Control avionics division for its aerospace business; Filtram automotive products; and Praxair sterilant gasses for its engineered materials sector. All of these deals are designed to help ALD meet its growth objectives by entering new markets with new products or product line extensions

Buying an individual product line, usually from a private company. Dover Corp., which operates as a conglomerate with a very small headquarters staff, uses its free cash flow for shareholder wealth creation—either by making acquisitions or by repurchasing stock. In 1993, Dover purchased eight manufacturing companies and three small elevator service operations representing an investment of \$320 million. These companies had a combined sales volume in calendar 1993 of about \$380 million and operating profit in excess of \$50 million. Dover paid about 10 times aftertax profit for these companies. While the manufacturing acquisitions typically have little in common with existing DOV operations, they will add

15% to Dover's revenues and, more importantly, will add \$0.30 or 10% to Dover's 1994 EPS.

Strategic acquisitions Eaton recently agreed to purchase Westinghouse's Distribution and Control business. While ETN did have a significant position in electrical controls through its Cutler Hammer division and other acquired companies, the WX acquisition makes ETN a major player in the electrical controls market. At the same time, the purchase reduces ETN's dependence on vehicle (mainly truck) components, from nearly two-thirds of ETN's profits to roughly an even split between vehicle components and electrical controls. Titan Wheel also made a strategic acquisition of a private company product line that added to sales and earnings. TWII's recent purchase of Dyneer broadens its product offering and expands its customer base and markets, thereby reducing its dependence on the agricultural sector from 49% to 27%. The deal doubles TWII sales and increases earnings by at least 15%. Other companies that made small acquisitions in 1993 are Cincinnati Milacron, Dresser Industries, Ingersoll Rand, Johnson Controls, Moorco and Parker-Hannifin.

Eli Lustgarten believes that almost every company he covers is in pursuit of acquisitions that will boost sales and earnings. Specifically:

Allied-Signal	Looking to add 4% top line growth through acquisition.
Amtrol	Base businesses are mature; searching for growth opportunities
Cooper Ind.	Searching for major acquisition for growth.
Dover	Looking for more acquisitions to enhance its internal 7% growth rate to double digit.
Dresser	Wants to acquire energy related companies.
Giddings & Lewis	Looking for product line extensions to stem its decline.
Harnischfeger	Talking about acquisitions, but spending more time divesting weak operations.
Indresco	Sold its share of the Komatsu joint venture and needs to find something to buy in order to grow.
Ingersoll-Rand	Has been more active in joint ventures but needs acquisitions to grow faster than the market on a long-term basis.
Johnson Cont	Constantly looking for bolt-on acquisitions.
Litton	Splitting into two companies: Litton Defense, searching for strategic acquisitions in a consolidating industry; and, Western Atlas, searching for acquisitions to grow in oil field and industrial automation.
Moorco	Looking for another business leg.
Navistar	Searching for an industrial acquisition to make use of its huge NOL tax benefits.
Parker-Hannifin	Looking for product line acquisitions.

TriMas

Company built by acquisitions and needs one soon in order to sustain a double-digit growth rate.

Who may get bought

Of course, with all these companies looking to make acquisitions, a lot of companies (including some listed above) are also logical targets. Industrial America is an eat-or-be-eaten arena in the slow-growth '90s. Some industrial companies that are logical targets are listed below. Acquirers would be willing in most cases to pay 10-15% premiums to current lofty market values, but not more. This is not an area like entertainment where managements have grand strategic dreams and are willing to pay up to build them. The industrial sector has gone through tough times over the past few years and, although managements are eager to make acquisitions to achieve top-line growth, they are not likely to overpay.

- **Donaldson**, a maker of air filters and mufflers for mobile machinery.
- **Farrel**, a small company that is a worldwide leader in rubber and plastic processing machinery
- **Harnischfeger**, a dominant maker of paper machinery and leading supplier of mining machinery. Demand for both products is relatively depressed right now, but the company is still profitable.
- **Indresco**, which serves mature industries in refractories (linings for steel mills) and mining equipment (drag lines and underground coal mines). This company is a stock market rarity—a company that sells around book value with no debt.
- **Litton**, a company that has split into two pieces—a defense company and an industrial company. The industrial company, Western Atlas, has two divisions: an oil field business that is 30% owned by Dresser and an industrial automation firm that is a leader in transfer lines and other assembly equipment for the auto industry. In the judgment of Eli Lustgarten, both sectors will either make an acquisition or be acquired.
- **Moorco**, an industry leader in oil field metering equipment and pressure relief valve.

Again, none of these stocks are likely to be the next Paramount Communications. But with so many industrial companies looking to make an acquisition to get top-line growth, some of them are likely to be acquired over the next two years. The likelihood of deals would increase if valuations declined, either because of a weak stock market in general or a more realistic understanding by investors

about the prospects for machinery companies in a weak

global economy.

Metals—Non-ferrous

How to buy a nickel for four cents

Back in the 1980s many acquisitions were driven by the fact that the replacement value of corporate assets greatly exceeded the stock market value of the company. For example, the short-hand explanation for the 1984-85 takeover boom in oil stocks was that it was cheaper to hunt for oil on the NYSE than to drill holes in the ground. Now that the DJIA is 2000 points higher and the view of replacement value is diminished in some sectors (such as steel) because of lower profitability and technological change that obsolesces capacity, this argument no longer holds for very many industries.

There are, however, exceptions. Hanson Trust, certainly one of the savvier companies prowling the financial markets, acquired Quantum Chemical on the theory that the current glut in the global ethylene market will eventually end and Quantum's earnings will increase explosively. Hanson's bid for Quantum was 60% above the pre-deal market price. Essentially, Hanson is betting that the stock market was valuing CUE on its dismal near-term earnings prospects, but that its true economic value over the course of the next six years is much higher. (However, the opportunity for Hanson to refinance low-grade debt also made Quantum attractive.)

In the judgment of PaineWebber metals analyst Peter Marcus, a somewhat similar investment situation is **Inco Ltd**, especially if the stock dips below 20. This is a world class company with unique and virtually irreplaceable assets, but the stock price is deeply depressed, along with the price of the relevant commodity—nickel. So a strategic buyer looking for long-term economic value might make a bid, notwithstanding the moderate losses the company is now incurring.

Inco's assets: Hard to duplicate

Inco has about one-quarter of the total world nickel market and fully one-third of the western world market. Because about two-third of nickel goes into stainless steel—which is used in all sorts of capital goods, construction materials and consumer durables—the long-term outlook for demand is quite positive. This is not a commodity that is in danger of losing market share to plastic or fiberglass. And, unlike steel, there are no new technologies to upset the apple cart.

Inco has enormous, virtually irreplaceable nickel reserves, mainly situated in Canada, as well as massive smelting capacity. Environmental problems make it extremely difficult to go out and duplicate this industrial capacity. Not many neighborhoods in Europe or North America are eager to have a nickel smelter belching fumes next to the village green, even if it does increase the tax base. When you smelt sulfide ore to produce nickel, you produce eight tons of sulfur for each ton of nickel. It is extremely costly to make the smelting process cleaner; Inco spent about \$530 million (U.S. dollars) to increase from 70% to 90% the portion of Sudbury, Ontario ores that are contained and not emitted into the environment. That expenditure alone is about 20% of Inco's market capitalization.

Nickel prices: more likely to rise than fall

Inco's stock hit a high of \$38 in 1989, but lately it has been trading around \$24 because the nickel spot price on the London Metal Exchange has been very depressed. The high price for the commodity in early 1989 was \$10.80 per pound; during the fourth quarter of 1993 it has been trading in a range of \$1.80 - \$2.15. Recent negatives for the price of nickel have been:

- Weak economies in Europe and Japan;
- An "inflexible production function" (e.g., lower spot prices do not lead to much lower production);
- Heavy exports from Russia, whose defense industry is no longer a big consumer of the metal.

However, a strategic buyer of Inco might well conclude that the longer term price picture is favorable because:

- Capacity additions are nil;
- The U.S. economy is expanding in a sustained if unspectacular fashion;
- The economies of Europe and Japan should expand in 1994 and 1995, in response to lower interest rates;
- Southeast Asia and Latin America will continue to grow at a healthy pace;
- Russian exports are beyond their peak because supplies of scrap and metals have diminished and some facilities have been shut;

- Russia's huge Norilsk nickel producing complex will be privatized, which will make it much more price sensitive. This will tend to cartelize the world nickel market.

A leveraged play on nickel prices

For various reasons, nickel prices are extremely volatile; a major move on the upside could cause the price to quadruple from \$2.00 to \$8.00, which would still leave it 26% below its 1989 high. Inco earnings are, in turn, extremely leveraged to nickel prices. Peter Marcus estimates that each \$1.00 per pound swing in the nickel price impacts Inco's earnings by \$2.25 per share. So an \$8 nickel price implies EPS for Inco of \$10.00. Clearly the pay-off for a patient strategic buyer could be huge.

Inco is trading at a 40% discount to replacement value

Inco's productive capacity is about 500 million pounds of nickel, and new capacity costs about \$10 per pound to build. The company has \$1.3 billion in debt. So replacement value, net of debt, is \$3.7 billion or \$33.6 per share. The stock has been trading around \$26 and has recently

gotten down as low as \$17. A strategic buyer who bid \$28 for the company would be acquiring unique, world-class assets at a 17% discount to their replacement value. Firms that might be interested in doing so include Broken Hill Proprietary Company, British Steel and RTZ Corp.

Of course, a buyer would be taking the risk that because of large inventories nickel prices remain depressed for an extended period, during which Inco bleeds red ink. The risk is real but the financial penalty would not be huge. Peter Marcus points out that, even at today's depressed spot price, the company is not under severe financial stress. Inco's earnings are break-even at a London Metals Exchange price of \$2.75. At \$1.90 per pound for the LME price, the pretax loss is \$0.70 per pound on deliveries of 400 million pounds. At a 40% tax rate, the aftertax loss is \$168 million. However, the company in 1994 will probably underspend its \$260 million depreciation expense by \$60 million. This leaves an aftertax loss on a "free cash flow" basis of about \$110 million, or \$1.00 per share—not a huge drain for a company with total debt of about \$1.1 billion and equity of \$1.6 billion.

Multi-industry

Varian:

Undervalued conglomerate that may destructure

Not unlike Hewlett-Packard or the late Fairchild Semiconductor, Varian is one of the "founding fathers" of Silicon Valley. It was founded by the Varian Brothers, Russell and Sigurd, who invented the klystron at Stanford University in 1937. The klystron is a tube used to generate microwave radiation and, over the years, Varian scientists invented a variety of commercial applications for microwave technology in such diverse areas as health care and semiconductor fabrication. Today the company has \$1.3 billion in revenues and \$130 million in pretax profits, which are generated by four divisions:

- **Health care systems** (30% of 1994 revenues, 58% of 1994 pretax income) Over one million people get cancer every year, and 60% of them receive some form of radiation treatment. Varian's radiotherapy systems have a strong and profitable position in this market, which unfortunately is a growth market. The business has 20% pretax margins and a growth rate of 10%, in the opinion of PaineWebber multi-industry analyst Jack Modzelewski.
- **Analytical instruments** (27% of 1994 revenue, 26% of 1994 pretax income) This division makes sophisticated precision measuring instruments used in such areas as chromatography (used by food and drug industries for quality and process control); nuclear magnetic resonance spectrometers (used to study the structure of molecules); optical spectroscopy (used to characterize and classify materials from samples in the agriculture and drug industries). In this sector, as in health care, Varian is a world leader.
- **Semiconductor equipment** (24% of 1994 revenues, 6% of 1994 pretax income) Has a decent market share in certain product lines, but poor profitability, particularly given the booming conditions in the semiconductor industry. A couple of new products and continuing cost-cutting efforts may boost the fortunes of this lagging division.
- **Electron devices** (19% of 1994 sales, 10% of 1994 pretax income) VAR is the world's leading producer of electron tubes and related equipment such as amplifiers and power suppliers. This equipment is used in high-power communications and radar systems, satellite

transmitters and TV and radio transmitters. The U.S. government is a major customer, but this division also has heavy exposure to the fast-growing telecommunications sector.

Over the past decade, Varian has been better at coming up with powerful new technology than at making money for shareholders. Today the stock price is materially below its 1983 peak of \$63. Three years ago, Tracy O'Rourke, who was instrumental in improving the profitability of Allen-Bradley and selling it to Rockwell, became chairman of Varian, with a mandate to improve shareholder value. As an owner of 400,000 shares and options of VAR, Mr. O'Rourke has significant incentive to raise the stock price.

Step # 1 in Mr. O'Rourke's effort to raise shareholder value was to sell marginal businesses and reduce headcount. This has been done, and headcount has dropped from 12,000 to 7,800.

Step #2, which should occupy the next couple of years, is to raise profitability of the core businesses and shrink capitalization. He will try to fix the semiconductor equipment business, maintain the growth of the other businesses and spend VAR's annual free cash flow of approximately \$60 million to repurchase shares. Varian has repurchased about 5% of its outstanding shares in 1992 and 1993, and recently approved another two million share repurchase program. Jack expects VAR's share repurchase to continue at a rate of at least 750,000 per year (4.5-5% of outstanding shares) with a potential for faster repurchase depending on share prices.

Step #3 is to close the gap between the public stock market value of Varian and its private market value, which is 40% higher (see below).

The conglomerate discount or—What does a semiconductor analyst know about radiotherapy?

Varian's shares suffer from that silent but ubiquitous nemesis of diversified companies, the conglomerate discount: Investors are afraid to pay a high multiple for the shares because, as a conglomerate, it:

- a. Has fundamentals that are spread across disparate industries and, therefore, are hard to understand; and,
- b. Is a "pure play" on nothing; conglomerates always seem to have at least one business that is in trouble.

Varian is certainly a prime victim of the conglomerate discount. After all, it is mainly covered by Wall Street's semiconductor analysts, even though semiconductor equipment produces 24% of sales (versus 30% by health care) and only 6% of pretax profits (versus 58% for health

care). Obviously semiconductor analysts are not in a particularly good position to fully appreciate the virtues of Varian's health care division.

The parts are worth much more than the whole

Varian's current stock market capitalization is \$1 billion. However, the aggregate private market value of its four divisions is about \$1.4 billion, based on this analysis:

- **Health care systems.** Given its high profit margins, large market share and 10% growth rate, this sector is worth 8 times estimated 1994 pretax earnings of \$81 million, or about \$650 million.
- **Instruments.** This division, which will generate about \$365 million in sales in 1994, is more profitable than it looks. Gross margins are around 70% but the operating margin is held down by the large number of people in distribution, sales and service. (About two-thirds of the division's 1,800 employees are in these functions, while only one-third are in manufacturing.) A strategic buyer that already had a distribution system in place could substantially raise margins by reducing headcount. Jack Modzelewski thinks that, on a standalone basis, this business is worth about \$400 million.
- **Semiconductor equipment.** As noted, the profit performance of this division has been terrible and top management is trying to fix the problems by developing a new product, called MB². Recently, however, VAR's semiconductor equipment business is showing signs of improvement—fiscal first quarter orders are at record levels only two months into the quarter. Its best product line, an ion implanter, is worth \$150 million by itself. If we use \$200 million as the value of the division, we are valuing it at only 60% of sales; other semiconductor equipment companies are valued in the stock market at 0.7 to 2.0 times sales. (Applied Materials currently trades at 80% of sales.) So clearly the division could be worth significantly more than \$200 million if some good new products are developed.
- **Electron devices.** With sales of \$250 million, half military and half commercial, it has pretax margins of 5-6%. If costs were cut further it could do \$20 million in profits. Valued at 60% of sales, which is fairly standard for defense companies, it is worth about \$150 million.

Putting together the value of these divisions their aggregate break-up value is \$1.4 billion:

Health care	\$650 million
Instruments	400
Semiconductor Equip.	200

Electron devices	150
Total break-up value	\$1,400
Current public market value	\$1,000

Closing the value gap

The current break-up value of Varian is about 40% above current market value. Mr. O'Rourke's strategy to close this gap will basically be two-fold.

1. Demonstrate to investors that VAR shares are undervalued:
 - Continue to expand the private market value of all of VAR's businesses through aggressive cost-cutting, productivity improvements and new product introductions.
 - Use excess cash flow for share repurchase (1+ million or 4-5% of outstanding shares are repurchased annually).

And, should number 1. fail . . .

2. Consider closing the gap by taking steps to realize the private market value of the four divisions. Clearly the most aggressive way to do this is simply to call in the investment bankers and announce that the four divisions are up for sale. There are few synergies among the four divisions that would impede this process. Alternatively, the company could be divided into two pieces—as Litton Industries did—or the most volatile divisions (such as semiconductor equipment) could be spun off.

Xerox:

Cost-cutting story

With nearly \$15 billion in sales, Xerox has a very strong franchise in the worldwide document processing business. However, financial performance has been weak for more than a decade; XRX will earn about \$5.00 in 1993, versus a 1980 peak of \$7.33, and the dividend has not been raised since 1981. However, PaineWebber analyst Matthew Diserio believes the company will improve its financial performance markedly over the next two years by cutting costs, selling its financial services businesses, and paying down debt. Despite revenue growth of just 2-3%, earnings per share are projected to increase from \$5.17 in 1993 to \$8.67 in 1995. This is a classic cost-cutting story that also has a destructuring dimension because of the sale of the financial businesses.

Restructuring plan should reduce SG&A by 400 basis points

Xerox announced on December 8, 1993 a major restructuring which should significantly reduce future operating costs. The restructuring includes the reduction of in excess of 10,000 of Xerox's 97,500 employees. The plan also includes downsizing facilities, outsourcing various operations and reducing layers of management. The restructuring will result in a \$700 million charge or \$6.82 per share, to be taken in the fourth quarter of 1993.

Significant savings from the planned actions will begin in 1994 and increased savings will be realized in subsequent years. The impact on the income statement should be to reduce SG&A from 32% of sales in 1993 to 28% in 1995. Matt estimates that EPS should increase from approximately \$5.00 in 1993 to \$6.10 in 1994 and \$8.70 in 1995.

Along with stable to slightly higher document processing revenue growth, Xerox has the ability to generate approximately \$1 billion in combined net free cash flow for 1994 and 1995. Based on 1995 EPS of \$8.70 and an eventual multiple of 15 or 80% of the market gives a target price for Xerox in excess of \$120.

Key actions of CFO Barry Romeril

Not unlike Monsanto, Xerox's restructuring is being spearheaded in part by an executive other than the CEO. Xerox's new executive vice-president and chief financial officer, Barry D. Romeril, is coordinating the efforts to reduce SG&A expense. Mr. Romeril, 49, formerly was group finance director for British Telecommunications PLC in London. Xerox has said it hopes Mr. Romeril's expertise in cost control will continue to prove useful as Xerox refocuses on its core business of document reproduction and other related technologies.

At British Telecom, Mr. Romeril helped plan and spearheaded a three-year cost-cutting program. Under that program, British Telecom's employment has fallen by about 35,000 to 165,000. When British Telecom was initially privatized in 1984 its total work force numbered 241,000.

Divestiture of financial services

This is the other key element of the Xerox story, in addition to plain old cost-cutting. In January 1993 Xerox announced its decision to concentrate its resources on its core document processing business and to sell or disengage from its insurance and other financial services businesses, which include Crum & Forster, Xerox Life and Furman Selz. Crum & Forster, the largest business, wrote \$700

million in insurance premiums for 1992. Xerox has received regulatory approval to restructure Crum & Forster's insurance operations into seven individual operating groups. This action should increase the realizable purchase price that Xerox receives. Xerox has already sold some of its smaller financial businesses, including VKM, Van Kampen Merritt, and Furman Selz.

Matt estimates that the current book value of Xerox's insurance and other financial services (IOFS) is approximately \$3 billion. He anticipates IOFS will be sold in pieces or in its entirety and that Xerox will realize a pur-

chase price close to its book value. Proceeds from the IOFS sale will be used to repay virtually all of the long-term debt allocated by Xerox to IOFS. The result will be that Xerox Corp., aside from matched liabilities associated with the finance operations of Xerox Credit Corp., will essentially be debt free.

Net net, after it has sold its financial businesses and cut costs enough to reduce SG&A as a percent of sales by 400 basis points, Xerox will be a much leaner, more focused, more profitable company.

Packaging

Two small acquisition candidates

Packaging is a very mature \$80 billion industry in which most sectors grow units 2-3% per year. Pricing trends are static; indeed, prices will generally decline for the foreseeable future. Food, beverage and household product companies whose profit growth is threatened by disinflation are trying to protect profitability by cutting packaging costs. In this difficult operating environment, the packaging industry will continue to consolidate. Companies will have to grow EPS on a do-it-yourself basis domestically, through either internal cost reduction efforts or acquisitions. In the last year we have seen a number of companies be acquired, including Constar, Heekin Can, Van Dorn and Engraph. On average, the companies were sold at one times sales and 12.9 times EBIT (Table 8).

Table 8

Valuation of recent acquisitions in packaging industry*

Company	Date	—Multiple of—			Acquiror
		EPS	EBIT	Sales	
Constar, Int'l.	Sep-92	18.1	13.2	0.9	Crown Cork & Seal
Heekin Can	Dec-92	21.0	14.0	0.8	Ball Corp.
Van Dorn	Dec-92	23.0	11.5	1.1	Crown Cork & Seal
Engraph	Sep-93	22.0	13.0	1.1	Sonoco Products
<i>Average</i>		21.0	12.9	1.0	

*On PW forecast results for year following acquisition.

Given the recent takeover activity and the likelihood that it will continue, it is worth considering which "small" companies might logically receive an offer. Among the firms covered by PaineWebber packaging analyst George Staphos, there are two such companies: **Sealright** and

Paco Pharmaceutical. We make no suggestion that these two companies are actually considering sales or mergers—merely that they are companies that larger firms might well be interested in acquiring.

Sealright

This company generated sales in 1993 of about \$280 million, of which 60% were rigid frozen dessert containers and other dairy product used for ice cream, yogurt, etc. and 40% were "flexible packaging" such as bags for snack foods and dried fruits, soft drink bottle labels, etc. 1993 was tough for SRCO, with EPS declining 34%, to \$1.02. However, they should rebound to \$1.10 in 1994 because of better demand, reduced price competition and cost-cutting. The stock has a P/E multiple of 13x on 1994 earnings and a secular growth rate of 8%. Why might Sealright look attractive to a potential acquirer?

Potential buyers (which include larger paperboard or flexible packaging companies such as Sonoco and Bemis) could achieve synergies with SRCO's paperboard and flexible packaging operations. Specifically, they could cut sales force and administrative expense, buy plastic resin better, use their own paperboard rather than buying on the open market, etc. The company has invested heavily in capital equipment and has up-to-date facilities.

Sealright has no takeover or shareholder rights provision to speak of in its charter. A hefty 35% of the shares are owned by a Kansas-based investment bank that took SRCO public. (However, some members of the bank are on SRCO's board, so they would presumably behave like insiders.) Another financial buyer owns about 18%. These owners might be willing to sell at the right price.

Based on recent acquisition valuations, SRCO could receive an offer in the \$20-25 area, or a P/E of 18 on 1994 or 1995 earnings. This is 10% below the P/E multiples at which Engraph and Constar were acquired, which is appropriate because Sealright's growth prospects and fundamentals are not as strong. Nevertheless, an offer of, say, \$23 per share would be a nice 35% premium to the company's recent stock price.

Paco Pharmaceutical Services

This is a small company with only \$70 million in revenues that provides outsourcing packaging services for large pharmaceutical companies and outsourcing manufacturing for household products companies. For example, it might package some of Merck's pills and manufacture some of Colgate's deodorant. George Staphos projects full-year EPS of \$1.05 in fiscal 1994 (ends March 31) and \$1.15 in fiscal 1995. Paco might look attractive to a potential acquirer because:

1. It is a cheap stock, trading at less than 10 times fiscal 1995 EPS. It has a huge \$8 million in cash, equal to nearly 20% of its total market capitalization. So at the

current price you are paying only about 6-7 times earnings for the operating entity.

2. Potential buyers include large contract manufacturers and packagers that want to expand operations (such as Toronto-based CCL Industries), as well as perhaps generic drug companies without any in-house packaging operations (such as Perrigo). Most large drug companies have *some* in-house packaging capability; the generic companies might wish to have some as well. Financial buyers could be attracted by Paco's exceptional cash generation, as evidenced by the above-mentioned \$8 million on the books, and the fact that free cash flow, after dividends and capital expenditures, is \$0.75 per share, or fully 70% of EPS.
3. Paco does not have a significant amount of insider ownership.

Paco could be acquired for about \$14+ per share range, well above its current price. This would be at a discount on recent valuations, which would be justified by the fact that Paco's growth rate is relatively low and it is not a true packaging company.

Personal care products

Helene Curtis: Strong brands, low margins, logical acquisition

Helene Curtis is a family-controlled cosmetics company with \$1.2 billion in sales that might well be sold in the next one to three years, though there is no evidence that a transaction is imminent. In essence, HC is a company with some strong brands that operates in a fragmented, low-margin segment of the personal care market against corporate giants such as Procter & Gamble and Gillette. In the era of "brand consolidation" that PaineWebber analyst Andrew Shore forecasts for the 1990s, it would make sense for HC to sell out to a larger firm, such as a foreign firm that wants to build a U.S. presence rapidly.

A low-margin business in a tough market

As Andrew sees it, Helene Curtis' major problem is that its costs are too high, but it is unclear how they can be meaningfully reduced without a material decline in the company's market share. The company manufactures and markets personal care products and has a leading position in the U.S. hair care market through such brands as Suave,

Salon Selectives and Finesse. While management is skilled at creating brands and building sales, the company has long had a difficult time in growing profits and expanding margins.

The problem is that too much of HC's product mix is in low-margin hair care categories, such as shampoo, that have the highest cost of introduction, the highest cost of failure, the shortest product cycles, the lowest operating margins and the most difficult-to-differentiate products. Furthermore, the company is constantly pitted against the category leader, Procter & Gamble, and operates at a disadvantage because of an exceptionally high cost structure. The result is low profit margins; the net margin has been 1-2% since 1990, and even in the prosperous mid-1980s never got above 2.6%.

No room for error

These low margins mean that management has little room for error. Unfortunately, the company is currently nursing a \$30-50 million error, namely its latest, and unsuccessful, hair care line *Vibrance*. This is one reason why EPS are

forecast to decline from \$2.33 in 1992 to \$1.60 in 1993. The stock has followed earnings south, with shares trading 43% below their 52-week high.

Because Andrew expects brand consolidation to be a dominant trend of the 1990s, he does not see Helene Curtis' prospects brightening significantly over the next few years. In fact, the company is in something of a Catch-22 situation. With sales weak, management can either A) focus on regaining top-line momentum by pushing new product launches, which will hurt margins, or B) attempt to raise margins by cutting marketing and advertising expenditures, which will probably weaken sales growth.

A family decision

The company could escape this Catch 22 by putting the company up for sale or allowing itself to be taken over. This would appear to make a lot of sense, because an acquiring company with established products could create its own family of Helene Curtis brands, and thereby capture economies of scale in marketing.

Whether or not HC is sold is up to the Gidwitz family, which owns about a third of the outstanding shares and more than three-quarters of the voting shares. The current CEO is Ron Gidwitz, whose father and uncle founded the company. It is not implausible that the family would be willing to sell; although there is no near-term catalyst for a transaction, the family might decide to sell if it sensed that HC's franchise was being eroded by the competitive pressures we have described.

Who might buy Helene Curtis?

Because this is a \$1 billion company it would probably have to be a big company, perhaps a foreign firm that wants to enter the U.S. and build share rapidly. One possible candidate is L'Oreal; other possibilities are Benckiser and Wella. As regards a takeover value, at the current price of \$27 per share, the company is being valued at 0.20 times sales. A reasonable transaction price would be 0.3-0.4 times sales, implying a price of \$38-51. This is based on the valuation of recent deals, taking into account HC's relatively low margins and the opportunity for another buyer to cut costs by reducing headquarter expenses, etc.

Pollution control

A buy-out candidate in an industry where synergies are for real

The U.S. pollution control industry is highly fragmented, and consolidation has been a constant, pervasive reality ever since waste disposal stocks have been publicly traded. The two biggest firms in the industry, WMX Technologies and Browning-Ferris, were built through acquisition. Consolidation is likely to continue because much of the industry is still in the hands of relatively small, inefficient, under-capitalized entities. Today 30% percent of the solid waste disposal business is owned by public companies, 30% by small private operators, and 40% by municipalities. PaineWebber pollution control analyst Robert Miner expects consolidation to continue in the future at a rapid pace; in a few years public companies' share of the industry should rise from 30% to 50% as small companies sell out and municipalities privatize.

Some of the factors driving this consolidation process are also to be found in other consolidating sectors (such as financial services and health care). Other factors, however, are unique to the industry:

- As with health care and banking, profit margins and growth opportunities have been under pressure in recent years, and this is forcing smaller, weaker players to sell out. Garbage growth has decelerated as economic growth has slowed, and there has been an unfavorable mix shift as recycling grows in importance. Moreover, tough regulation is hammering small municipalities and "mom and pop" firms. Subtitle D regulations, which began to be implemented last October, require a very costly upgrading of landfills with impervious bottom and side liners, extensive perimeter ground water monitoring, detection systems for methane generation, and pre-funding of planned closure costs. Many small operators simply cannot afford to spend millions of dollars to implement these changes.
- As noted, all the major publicly traded companies have historically grown through acquisition, so there is no shortage of willing buyers.
- Unlike many industries today (such as entertainment or machinery) acquisition targets in pollution control are attractively valued, because the industry is much hated

by investors after several years of disappointing results. In general, executives in the industry have a more bullish view of the industry than do portfolio managers; consequently they view these low valuations as an opportunity to buy.

- The factor that most clearly sets this industry apart from most other industries is that the noun “synergies” is not synonymous with “fantasy.” In the garbage business, synergies are for real. This is a down-to-earth, nuts-and-bolts, down-and-dirty industry that involves picking up garbage from point A and moving it to point B and doing it cheaper than the other guy. Unlike, say, financial services or entertainment or high technology, there is not much room for CEOs to delude themselves that someday there will be product development or marketing synergies where none exist today. In both sides of the garbage business—collection and disposal—savings can be garnered when two companies merge. On the collection side, if two companies are picking up garbage in the same town, *a merger of their operations will save money through rationalization:* i.e., one dispatcher instead of two, one maintenance department instead of two, lower insurance costs, higher “route density” as one truck goes down each street instead of two. And less competition leads to better pricing.

On the disposal side, a merger can make a landfill much more profitable by increasing its revenues. Suppose company A has a landfill in a town and a fairly small collection system channeling garbage into the facility. Fixed costs are high—for amortizing the cost of the land, investing in the liner, monitoring leakage and methane generation, etc.—but the variable costs are low. If company A owns a dump and acquires company B, which then starts to channel its refuse into the facility, the *dump’s revenue increases much more than costs, and profits jump.* In addition to these true operational synergies, mergers will also save costs by reducing corporate overhead.

United Waste

One small pollution control company that has a fairly high probability of being acquired within a couple of years is United Waste, which will have 1994 revenue of about \$85 million. UWST has followed a strategy of carefully acquiring properties so as to gain a large market share in secondary non-urban markets that are not too competitive. They are mainly located in Michigan, Central Massachusetts, and Pennsylvania. The company is relatively “disposal oriented” rather than “collection oriented,” which means it is oriented toward the high-margin part of the business. UWST’s operations are well integrated; 80% of the waste it collects is “internalized”—i.e., deposited in one of its own dumps. The company lost \$0.57 in 1992, will earn \$1.00-1.05 in 1993, and is forecast to earn \$1.30 in 1994. Earnings can grow at a 20% pace in 1995 and 1996.

UWST would be a good acquisition for a larger firm such as Browning-Ferris or WMX, because both firms could realize significant savings by integrating UWST into their operations and reducing UWST overhead. There is little doubt that UWST would be willing to sell because management is entrepreneurial and has experience in building and selling companies. Indeed, UWST was in merger negotiations in the middle of 1993 but could not settle on a price. The stock is now trading at \$15, but management will probably hold out for a price of \$22-23 because it believes the stock—even without a merger—should be trading at \$20 by late 1994, based simply on 1994 EPS of \$1.30 and an industry multiple of 15-16. Given the cost savings that could be realized, a buyer could afford to acquire UWST today for \$20-\$22.

For investors, UWST would appear to be a win/win proposition. Fundamentals are strong and the stock is cheap, so it should be a good investment if it is not acquired. But it would be an attractive acquisition at prices well above its current price, and there is a fairly good probability that it will be acquired within two-three years.

Retailing—Music

Blockbuster, Musicland, and the consolidation of music retailing

Blockbuster Entertainment made more major strategic moves in the past 18 months than many firms make in a decade. It is worth trying to put them in perspective in order to figure out where they are taking the company and what it means for one business BV is expanding into—music retailing.

Ironically, although Blockbuster Entertainment is a young firm in a young industry, it has the same strategic problem as the cigarette companies, quintessentially mature businesses in North America's oldest industry. Not unlike Philip Morris or RJR, Blockbuster has a highly profitable business—video rentals—that is threatened by hostile environmental forces. For Blockbuster, as for the tobacco giants, the solution is to diversify—something that is easy to do when you have strong cash flow, but *exceedingly difficult to do well*. The fundamental issue for the stock is: Will BV's diversification moves be successful, or is the company simply collecting a bunch of future management headaches? PaineWebber analyst Craig Bibb, a long-time bull on the stock, believes BV's diversification will succeed.

The neighborhood Disney

Blockbuster is trying to transform itself from America's video-rental king into a diversified purveyor of neighborhood entertainment. It dominates the video rental business, with a 17% market share and literally no formidable competitors. (BV is bigger than the next 375 competitors combined.) This is a very nice business, because—unlike the retailing of hamburgers, blue jeans or paper towels—you hand a product over to the customer in return for cash and then, a couple of days later, the customer brings the product back to the store and you sell it again. A single tape of *Terminator 2* costing BV \$56 to buy, will rent for five years or more at \$3.00 a shot, producing 80% gross margins. BV's video rental stores have a pre-tax cash return on investment of 73% and account for about 80% of BV's \$200 million in free cash flow.

The long-term viability of this wonderful business is threatened by the information highway and video on demand. Like the demise of cigarettes, this process could be a lot slower than many observers think, but to counter the threat and maintain BV's stellar growth rate CEO H. Wayne Huizenga and his colleagues are moving forward

on many fronts. The key initiatives, which are financed by free cash flow and the issuance of stock, are:

1. Expanding and diversifying the video store network. BV intends to increase its system's share of the U.S. video rental market from 17% today to 20% by 1995. It is also acquiring major franchisees. Furthermore, the stores have shifted away from merely renting videos to two new businesses that have been successful: Selling video tapes and renting and, as of the fourth quarter, selling video games. Soon BV will rent and sell other types of software, such as CD ROMs. (It is experimenting with CD ROMs—see below.)
2. Expanding the video rental business outside the U.S. The Blockbuster system includes 1000 international video stores right now or 31% of the total. These stores are in ten different countries though most, 800, are smaller stores in the U.K. where BV has a 25% market share. By 1997 the company intends to have 2000 international stores with revenues in excess of \$1 billion. Of course, these stores are also vulnerable to video-on-demand, though the threat will come sooner in some countries (such as the U.K.) and much later in others (such as Mexico).
3. Aggressively moving into music retailing. In the fall of 1991 BV acquired Sound Warehouse and Music Plus, which had about 240 stores and \$400 million in revenues, and entered into a joint venture with Virgin Retail to open 10 megastores in the U.S. as 75/25 partners. BV also bought half of Virgin's interest in 15 other megastores, mostly overseas. In October, BV bought Super Club USA, which included 272 music stores. As a result, BV is suddenly the third largest music retailer in the country with 514 stores though only one of those stores flies the Blockbuster banner. During 1994 BV plans to convert 200 stores to the Blockbuster Music Plus format and build 100 new stores.
4. Developing digital delivery capability. BV is pursuing a major joint venture with IBM to develop a system that downloads music CDs and video games (or other digitized software) from a central computer to a file server at its stores. Once called Soundsational, it now goes by the title New Leaf Entertainment. The six major record labels initially reacted very negatively to the scheme, on the grounds that it would weaken control of their product, but two of them now plan to participate in a limited test of the system. This system, which is de-

signed to supplement not replace the in-store inventory, would initially reduce unmet demand at the store because a particular title was out of stock. Longer term the system could act as an extensive, decentralized file server network that would allow BV to download movies or other digitized software directly to the home.

5. Acquired majority interest in Republic Pictures and Spelling Entertainment. These companies have extensive libraries of older movies and television shows as well as the international rights to numerous old and new films. The companies' TV library encompasses most NBC and CBS programs prior to 1973 including *Leave it to Beaver* and *Bonanza*. Current Spelling TV productions include *Beverly Hills 90210* and *Melrose Place*. Prior Spelling productions include *Charlie's Angels*, *The Love Boat*, and *Dynasty*. Spelling also owns the television rights to the Carolco library including *Terminator 2* and the *Rambo* series.
6. Spelling/Republic is an active acquirer of both the international and video rights to current film productions. The association with Blockbuster, which is the single largest purchaser of Hollywood product, should give added leverage to these efforts.
7. Invested \$600 million in Viacom. To help finance Sumner Redstone's bid for Paramount, BV agreed to buy \$600 million of 6% coupon VIA preferred stock (This could be reduced to \$300 million if VIA loses its bid for PCI). The alliance with Viacom creates some very interesting cross promotion opportunities between say MTV and BV's music stores and Nickelodeon and the video stores, or perhaps even an MTV music mega-store along the lines of the Warner Bros. stores. PCI/VIA/BV would also represent a formidable vertically integrated producer and distributor of filmed product that started at a movie studio and spanned theaters, home video, pay cable, basic cable and broadcast plus international distribution via Spelling.
8. Bought 21% of Discovery Zone. ZONE is an operator of neighborhood indoor play centers for children. BV has the right to develop 100 Discovery Zone centers as a franchisee and a two-year option to buy control starting in 1994. Discovery Zone's initial public offering created a \$100+ million paper profit for BV. This business, which entails charging a \$6 admission for use of the facility, requires very little inventory, costs \$500,000 to \$700,000 to open, and generates \$1 million a year in revenue.
9. Developing plans for Family Entertainment Centers. These centers, which will be designed to entertain

adults as well as their kids, will have a video arcade, virtual reality and motion simulator "rides," a batting range, a golf driving range, pool tables, etc. BV hired the former head of Disney's Magic Kingdom to develop this concept.

10. And perhaps "Wayne's World." BV is considering a plan to build a theme park, sports stadium and shopping/entertainment complex on 1600 acres in Southern Florida. Unlike most of BV's ventures, this would be a capital-intensive business with an unknown ROI. Management says that it would be content to be the overall manager of the complex and lay off the building of the theme park and other features to different partners. This approach would minimize the company's required investment.

Can Blockbuster keep all these balls in the air?

One reason to be optimistic is that BV management has demonstrated a tremendous ability to roll out a retail concept rapidly and effectively. (The firm's revenues have gone from \$30 million to \$2 billion in six years, a nifty 101% annual growth rate.)

Furthermore, there really are some "synergies" among these various business. BV can cross-promote between the video stores, which have a vast and growing clientele, and its newer operations. For example, anyone who rents a video at Blockbuster could receive a \$1.00 off coupon on any CD bought at a music store. Or Blockbuster's list of customers could be used for direct-mail promotion of the music stores and entertainment centers. To this end, BV will introduce in early 1994 a universal Blockbuster card good at all Blockbuster outlets whether video, music, Discovery Zone or whatever.

And as the biggest buyer of Hollywood product Blockbuster can provide a lot of business to Republic, Spelling, and any creators of software content that it may acquire in the future. These programmers will benefit from Blockbuster's proprietary knowledge of which catalogue videos are most popular. It turns out, for example, that Louis Gossett Jr. is extremely popular; his *Diggstown* had an indifferent theatrical run but was a big hit in the video stores.

By virtue of its strong brand name, extensive store base, huge buying power, and expertise in distributing software to consumers, Blockbuster is hard for the big hitters in the entertainment field to ignore. For example, BV recently announced a plan to demonstrate the virtues of CD ROM in 52 video stores in the San Francisco area, by allowing customers to use the software on PCs set up in the store.

Other participants in the venture are IBM, Apple Computer, Sega, Panasonic, Sony and Philips Electronics. The point is that BV occupies a very strategic position on the information highway because millions of customers enter its stores every week, looking for software to rent or buy.

Consolidation of music retailing

In most segments of retailing the American consumer is pampered, getting vast selection in large stores. This is true whether she is shopping for lettuce at Safeway, clothes at The Limited, air conditioners at Circuit City or sandpaper at Home Depot. Two closely related exceptions to this rule are music and books: Most stores are small and the selection is pathetic. It is estimated that 40% of shoppers walk into a record store and leave without buying anything, because they could not find what they were looking for. The situation is similar in books. This is particularly true of small stores situated in malls, which tend to have high prices as well as poor selections, and which are now suffering from the fall-off in mall traffic during the austere '90s.

Blockbuster intends to take advantage of this gap in American retailing. The Virgin-Blockbuster stores will be shopping "destinations" that offer huge selection and are fun to be in. Selection will be smaller in the stores Block-

buster acquired from Sound Warehouse and Music Plus, but this hopefully will be remedied by the New Leaf/Soundsational system.

Musicland's strategy

Blockbuster is not the only firm trying to improve music retailing. Musicland Stores, which has about 870 mall-based music stores, has developed a new format—large, free-standing stores called Media Play that sell CDs, videotapes and books. They aim to win by offering both wide selection and very competitive prices. The first Media Play is generating \$10 million in annualized revenues, versus \$1 million for mall-based stores; the figure could go to \$12-\$13 million once the concept is refined. The company opened 13 stores last year and will open 25 annually starting this year. In essence, Musicland is doing in music what Barnes & Noble is doing in books—breaking out of the high cost/small selection mall-based format into larger free-standing stores.

Eventually Musicland will be competing head-to-head with Blockbuster. In the process we are likely to see the acquisition or demise of several other music retailing companies including Spec's Music, Trans World Music, Live Entertainment and National Record Mart.

Retailing—Supermarkets

Three consolidation plays in the supermarket sector

In an era of moderate population growth, low food inflation and tight-fisted consumers, grocery retailing has become yet another industry where it is not easy to generate top-line growth. Firms that invade new markets and build a bunch of stores can run into trouble in a number of ways. When Food Lion exported its "bare-bones" format from the Carolinas to Texas, it discovered that big-spending Texans were not interested in Food Lion's food retailing formula of limited quality and selection at a great price. Food Lion just announced it will not expand further in Texas and may sell its operations there. Smith's Food & Drug made the opposite mistake when it took its big, lavish stores from Salt Lake City to larger markets such as Phoenix and Southern California; when the new stores did poorly, the stock dropped from \$44 to \$19. The point is that local chains are not stupid and are already giving grocery shoppers what they want. So invading a new territory

with a new format is a risky proposition, given the lesser degree of differentiation possible in food retailing.

This makes growth through acquisition a logical strategy in supermarkets, as it is in machinery, banking, packaging and many other businesses. So which companies are likely to be acquired? PaineWebber supermarket analyst Gary Giblen believes that **Weis Markets** and **Giant Food** are good takeover candidates for much the same reason. Both WMK and GFSA are good companies with a solid regional franchises; both firms have elderly founders who own large amounts of stock; in both companies members of the succeeding generation do not appear to have any great interest in continuing to run the businesses and would probably be willing to sell out.

Weis Markets operates food markets primarily in Pennsylvania. The company was founded, and is still run, by Sigfried Weis who is currently 77 years old. While Mr. Weis' cousin, Robert, is the vice president and treasurer of

the company, Gary Giblen would not be surprised if Mr. Robert Weis chose not to succeed his cousin. In such a situation, Weis Markets would then be an attractive takeover candidate.

What makes Weis particularly attractive to a potential buyer is that its margins are among the highest in the supermarket industry. Three factors explain Weis' superior profitability. First is the location of the bulk of the stores in central Pennsylvania. These stores typically have little or no competition because any potential competitors would have to employ expensive unionized labor, whereas Weis is completely non-unionized. Second, there is a shortage of prime real estate for a competitor to build on in central Pennsylvania because of a very large flood plain area. Finally, Weis is backward integrated to an unusual degree, manufacturing a relatively high proportion of the products that it sells (e.g., dairy products, baked goods, canned goods, etc.).

One other factor that would make Weis an attractive takeover candidate is the large amount of cash it has on the balance sheet—\$422 million as of June 26, 1993. The rule of thumb is that a supermarket typically needs only 0.5% - 1.0% of annual sales in cash, which would imply that Weis has \$409 million of excess cash, or \$9 per share.

Who would be a likely buyer of Weis Markets? There are several possible candidates. One is Ahold, the big Dutch company, which has already made some acquisitions in Pennsylvania and surrounding areas. If Weis Markets were to be put up for sale, Ahold would very likely be a bidder, because Weis would "fill out" its network of stores and Ahold would have no trouble financing the deal. Another plausible buyer is Supervalu, which is the largest food wholesaler in the U.S. but is busily making acquisitions so as to shift more of its business toward the retail end of the business. Supervalu also has the financial capability to make a bid for Weis. For a third potential buyer, Penn Traffic, Weis would be a rather large acquisition, but also a very logical one, since Penn Traffic has been acquiring supermarkets chains in Pennsylvania.

How would a deal be priced? A multiple of 14 times trailing operating cash flow (to reflect a premium for cash on hand) seems reasonable, implying a price target of \$35 per share.

Giant Foods operates a chain of supermarkets with \$3.5 billion in sales that is the dominant player in the attractive Baltimore and Washington D.C. markets. Margins are high because of good locations, nice stores, an exceptionally dominant 50% market share and a large private label operation. On the downside, the chain is heavily union-

ized. The company's founder, chairman and CEO, Israel Cohen, is 80 years old and is gradually retreating from the day-to-day running of the business. While Mr. Cohen and the founding families own 100% of the voting class of shares and 13.2% of all non-voting shares, no family members seem likely to succeed Mr. Cohen.

By purchasing Giant Foods, a buyer could quickly establish itself in a large and lucrative market. And, like Weis Markets, Giant has excess cash on the balance sheet—\$238 million, or 5.1% of sales, as compared with the 0.5% to 1% of annual sales that is typical in the industry. Who might buy Giant Foods? In this case too, Ahold would likely be a bidder. So too might A&P, which also operates in the Baltimore/Washington area. As for a likely takeover price, applying a multiple of 8 times operating cash flow suggests a price of \$38.

A company that could be acquired for very different reasons is **Super Food Services**; the company has apparently lost its growth potential and selling out makes a lot of sense. Super Food is a wholesale food distributor that operates primarily in Ohio and Michigan. Two years ago, one-third of its business consisted of supplying Albertson's stores in Florida, a relatively fast-growing market. But when ABS achieved "critical mass" in Florida it dumped Super Food and built its own distribution center. Consequently, Super Food was unviable in Florida and had to resign its other business there, which together with Albertson's represented about 40% of corporate revenues. Now Super Food is stuck in slow-growth markets. Moreover, its customer base of small independent grocers is declining because of the inroads made by shopping clubs and Wal-Mart supercenters. Furthermore, the shift to everyday low pricing (EDLP) is a fundamental threat to the food wholesaling business in general, because a reduction in the number and size of deals jeopardizes the industry. About 50% of Super Food's profits comes from a business that seems to be disappearing—i.e., deal-related "forward buying" and "diverting."

It would appear then that selling out to another company would make a lot of sense for Super Food. Potential acquirers include Fleming, Supervalu and a private company, Scrivner. Given that this is not a high growth business, a multiple of 4-6 times trailing operating cash flow seems reasonable. Applying, say, a 6 multiple gives a target price of \$14, meaningfully above its recent price of \$12.

Retailing—Warehouse clubs

Price/Costco: Recent merger, attractive stock in a consolidating industry

Yet another industry that is consolidating in the face of cut-throat competition is warehouse clubs. K mart is leaving the business by selling 91 Pace stores to Wal-Mart, operator of Sam's Wholesale Clubs, and closing 22 other Pace stores. It is generally agreed that this is a good move for both companies; K mart is divesting an unprofitable and uncompetitive business, while Wal-Mart is quickly building its store base in an industry where good sites are not easy to get.

Much more controversial is the recent merger of Price Co. and Costco, the two major players in the business other than Sam's (Table 9). Many investors are underwhelmed by the new company because, in light of the industry's recently sluggish sales, they are doubtful about the long-term viability of the warehouse club format. By contrast,

PaineWebber retail analyst Margo McGlade thinks the merger will be a winner. Warehouses are still a productive and profitable format when properly executed, Margo argues, and Price/Costco will benefit from many opportunities to cut costs and rationalize operations. The deal puts the combined company in a much better competitive position versus powerhouse Sam's than either company had individually.

Price Club ended its fiscal year (8/93) with 92 stores, situated mostly in the Southwest, Northeast and Canada, while Costco ended its fiscal year (8/93) with 108 stores generally located in the Pacific Northwest and Canada. Since August, PCCW added 9 additional net new stores for a total of 209 at the end of its fiscal first quarter. Sam's 331 stores are primarily located throughout middle America while BJ's 47 run mainly along the East coast (Table 9).

Table 9

The warehouse club industry

Critical operating variables

	PCLB*	COST*	PCCW*	Sam's	BJ's	Total
Fiscal 1993 sales (billions)	\$7,648.47	\$7,506.22	\$15,154.69	\$14,695.00	\$2,068.50	\$31,918.19
Fiscal 1994E sales			\$16,313.18	\$21,715.60	\$2,399.50	\$40,428.28
Percent change			7.64%	47.78%	16.00%	26.66%
89-93 revenue CAGR	11.77%	26.37%	17.89%	45.53%	24.94%	31.14%
Clubs at F92 year-end	81	89	170	256	39	465
Clubs at F93 year-end	92	108	200	415	52	667
Percent change	13.58%	21.35%	17.65%	62.11%	33.33%	43.44%
Average number of clubs	91.9	98.6	190.5	291.5	46.0	528
Average club size	120	120	120	110	105	113
Sales per avg club	\$83.25	\$76.11	\$79.55	\$50.41	\$44.97	\$60.45
Sales per avg square foot	\$693.74	\$634.24	\$662.93	\$458.29	\$428.26	\$533.85
Sales per ending employee (000s)**	\$351.93	\$361.12	\$352.43	N/A	N/A	N/A
Sales per ending member**	\$1,464.04	\$1,722.36	\$1,612.20	N/A	N/A	N/A
Inventory turnover	17.2	12.9	14.8	N/A	N/A	N/A
Dominant markets in top 50 entered			11	31	2	44
Percent dominant of top 50 entered			55.00%	65.96%	16.67%	88.00%
F1993 ROE	13.38%	12.65%	13.17%	N/A	N/A	N/A
L-T debt/equity	56.57%	32.70%	45.23%	N/A	N/A	N/A
Operating margin	0.06%	0.60%	0.40%	1.00%	0.05%	0.65%
Membership fees % of sales***	2.27%	1.91%	2.04%	2.00%	2.00%	2.02%
Membership fees % of ptax profit***	90.90%	79.68%	83.48%	66.67%	97.56%	75.54%
Property owned	81.52%	77.78%	79.50%	N/A	N/A	N/A

*PCLB, COST and PCCW are on an August fiscal year; F1993 is for fiscal year ended 8/93

**Figures for PCLB and COST are for F1992, figures for PCCW are for F1993; PCLB sales per ending member assumes 1.6 cardholders per member

***Sam's and BJ's reflect PaineWebber estimates; ignores corporate expenses for Sam's and BJ's

Allocating management responsibilities

PCCW has divided management responsibilities between the two headquarters offices located in San Diego, California and Kirkland, Washington. Costco is clearly managing the critical operations of the U.S. and Canadian club business including merchandising, store operations and finance. Price Club management retains responsibility for new business initiatives such as Quest electronic shopping kiosks, private label manufacturing, and developing the new markets of Mexico, Latin America and the Pacific Rim. We expect Costco management to move quickly to optimize the merchandising in all of the clubs, bringing the best of both operators to all stores. The introduction of "from scratch" bakeries into the Price Club units could have an immediate, positive impact on sales in those units.

Cost-cutting

Cost savings and efficiency benefits are likely. Benefits from buying larger volumes and comparing vendor prices should be almost immediate. The headcount is likely to decline as Price employees offered jobs in Kirkland choose not to relocate, or vice versa. Consolidation of systems and distribution, however, will take 6-12 months to accomplish. Eventually, the San Diego offices may be brought up to Kirkland. The cost benefit aspect of the merger is more of a fiscal 1995 than a fiscal 1994 story (Table 10).

Operating margin on a pro forma basis for the merged company as of August 1993 was 0.4%, well below the Price Company peak operating margin of 1.8% in fiscal 1987 and Costco's peak margin of 1.0% in fiscal 1992. This operating margin is before membership fee income which in fiscal 1993 was roughly 2% of sales. We expect the membership fees to remain between 2.0-2.2% of sales. The upside potential from increased warehouse productivity, better buying and expense leverage is in the operating margin. A small improvement in operating margin has a large impact on EPS. PCCW's sales in fiscal 1994 per share outstanding are forecast to be \$71.00. PaineWebber's operating margin forecast of 0.44% leads to fiscal 1994 EPS of \$1.00-\$1.05. Every 10 basis points by which PCCW exceeds our forecast translates to \$0.04 in earnings per share. With operating efficiencies, PCCW could increase its operating margin to 0.6-0.7% at current store volumes. With higher warehouse volumes very possible over the next five years, operating margin could return to 1.0% of sales.

Table 10

Price/Costco income statement

Fiscal years ending 8/93-8/95—Dollars in millions

	F1993A	F1994E	F1995E
Sales	\$15,154.7	\$16,313.2	\$18,790.7
Cost of sales	\$13,731.8	\$14,750.5	\$16,996.2
S,G&A expense	\$1,334.1	\$1,461.0	\$1,631.0
Preopening expense	\$28.2	\$28.6	\$30.1
Operating income	\$60.7	\$73.1	\$133.4
Provision for closings	\$5.0	\$0.0	\$0.0
Interest expense	\$46.1	\$50.0	\$65.0
Interest income	\$17.8	\$12.0	\$10.0
Membership & other inc.	\$309.1	\$339.2	\$394.6
Gains & other	\$33.8	\$24.0	\$25.0
Pretax income	\$370.3	\$398.4	\$498.0
Taxes	\$147.1	\$163.3	\$204.2
Net income	\$223.2	\$235.0	\$293.8
EPS (fully diluted)	\$1.00	\$1.02	\$1.25
Shares (fully diluted)	240.2	247.2	248.5
Margin analysis:			
Gross margin	9.39%	9.58%	9.55%
S,G&A ratio	8.80%	8.96%	8.68%
Operating margin	0.40%	0.45%	0.71%
Membership / sales	2.04%	2.08%	2.10%
Pretax margin	2.44%	2.44%	2.65%
Tax rate	39.72%	41.00%	41.00%
Net margin	1.47%	1.44%	1.56%

Major foreign opportunities

Strategically, the Price/Costco company is likely to remain bi-coastal, expanding primarily into existing or contiguous markets in the U.S. International opportunities are big. The simple fact is that many foreign consumers pay higher prices for branded goods than U.S. consumers; whether from Mexico, Japan, or Canada, tourists are frequently amazed when they shop in the U.S. Warehouses are a high efficiency, low cost form of distribution that is highly transferable to other markets, where indigenous competition is limited. International growth is a major opportunity for the company, one the stock market should begin to pay for over the next 12 months.

Both companies have been highly successful in Canada. Mexico should be a good market, but there the company must compete with Sam's. We see more potential in markets where PCCW is the first entrant and can secure a dominant position. The company will have three warehouses in the U.K. by the end of 1994; within 12 months announcement on expansion into the Pacific Rim, either alone or with a joint venture partner, is likely. The globalization of consumer markets should enable PCCW to work with many of its existing vendors

in foreign markets—particularly in such product lines as health and beauty aids, beverages, tobacco, consumer electronics and business machines.

The new company has announced 35-45 new store openings for fiscal 1994 in the U.S. and Canada, 4 in Mexico and 2 in the U.K. This would boost the store count by 20%. Our forecast for the combined companies is \$16.3 billion in sales and \$1.00-1.05 in EPS for fiscal 1994. We forecast a 15-20% rate of earnings growth between fiscal 1994 and fiscal 1998 as revenues grow at a 14-16% annual rate and margins expand due to economies of scale and a somewhat less competitive environment. With the multiple at 15 times our *calendar* 1995 EPS estimate of \$1.30-\$1.35, the stock is an excellent value. In our view, this new company has created for itself much greater security of market position and profitability. This should lead to higher investor confidence in the profit and growth outlook over the next 12 months, resulting in multiple expansion.

Industry consolidation is bullish for both major players

The Price/Costco merger plus Wal-Mart's acquisition of Pace cuts the number of major industry contenders from

four to two. This is bullish for both of the major surviving entities. Net new warehouse additions in 1994 and 1995 will be dramatically reduced by the elimination of Pace as a separate competitor, the substitution of Pace units for half of Sam's planned unit expansion and the merger of Price and Costco. We had originally expected 10 new domestic Price Clubs, roughly 15 new domestic Costco's, 65 new Sam's, 20 new Paces and 20 new BJ's—130 new domestic stores in all. We now expect roughly 25 new US Price/Costco's, 20-25 new Sam's clubs, 15 new BJ's and 22 net Pace closings for a total of 40 net new domestic units in 1994 or more than 60% less than previously forecast. These new warehouses will build on a base of approximately 660 domestic clubs at the beginning of 1994 (before 22 Pace closings), representing a 6-7% increase in units. PaineWebber continues to look for warehouse clubs to capture about 5% of the relevant retail market in the U.S. by the end of the decade, from approximately 3% in 1993. Therefore this market is not yet fully penetrated and will grow well in excess of overall consumer spending.

Telecommunications

Big buyers facing strategic risks are ready to deal

We will see many more mergers, acquisitions, and strategic partnerships in the telecommunications sector. Large companies with pockets so deep they reach down to their ankles find themselves in a perilous, fast-changing environment. Giant firms are forming cross-border alliances (e.g., British Telecom/MCI) or are merging across industries (e.g., Bell Atlantic/Telecommunications Inc.). Smaller firms are developing new technologies with enormous potential, such as various forms of wireless communications. To protect their franchises and avoid going the way of Western Union (remember telegrams?), the world's telecommunications giants will be wheeling and dealing. Because the stakes are so high and firms want to grab the best properties before competitors do, large firms will be willing to pay premiums for smaller firms that are well-positioned in the forefront of change. PaineWebber telecommunications analysts Jack Grubman and Jeffrey Hines highlight four firms that would appear to be logical targets:

Two niche players in the U.S. long distance market

Jack Grubman believes that **ALC Communications** and **LDDS Communications** could well be acquired. ALC and LDDS are resellers of long distance service, with estimated 1993 revenues of \$421 million and \$1160 million, respectively. Both companies primarily serve the low-end commercial market where customers' average bills are typically \$300-500 per month for long distance. The reseller market niche is very attractive because the small business market has the highest margins in the long distance industry and is also growing rapidly. Profitability is high partly because AT&T raised rates and the resellers followed. Furthermore, most calls are made during peak hours. In addition, costs for the fiber capacity that the resellers lease are going down because of rapid technological advances. Finally, AT&T, MCI, and Sprint have a competitive disadvantage in this market segment because they do no direct sales to small business customers. For these reasons, ALC and LDDS should be able to grow at a 20%

pace over the next five years through a combination of internal growth and acquisitions.

Given that ALC and LDDS are two good "second tier" players with nationwide switching capabilities, large customer bases, and strong systems and marketing skills, who might buy them? While the RBOCs are, of course, unable at the moment to buy a long distance company, Jack Grubman would not be surprised if legislation were introduced sometime soon that would effectively enable an RBOC to buy a company such as ALC or LDDS. The rationale for such legislation: the RBOCs employ close to 400,000 people, so it makes no sense to put them in a regulatory straight jacket so tight they wither, shrink, and ultimately lay off tens of thousands of voters. If such legislation were passed, Jack Grubman believes that there would be an 80% probability that an RBOC would make a bid for either ALC or LDDS.

Another possible buyer of ALC or LDDS is a foreign telco such as France Telecom or Cable & Wireless that wants to gain a toehold in the U.S. long distance market and get a feel for how the business is organized in the U.S. Because multinational corporations are demanding seamless global capability, such a move by a foreign telco would make strategic sense. There is a 50% probability that a foreign telco will bid for one of these companies in the next two-to-three years.

At what price? Both ALC and LDDS are currently trading at roughly 2 times sales and 8-9 times EBITDA, which are reasonable valuations for firms with 20% growth rates. A bidder for one of these companies could pay anywhere up to 2-3 times sales or 10-15 times EBITDA.

Two strategically attractive players in the wireless sector

Two of the mega-trends that keep telco CEOs awake at night are:

- The proliferation of *wireless communications*, which ultimately will be a viable alternative to traditional local telephone service. Recognizing the power of this trend, AT&T was willing to pay 20 times cash flow to acquire McCaw Cellular.
- **Globalization.** 15 years from now, the big players such as AT&T and British Telecom will be able to provide seamless service anywhere in the world.

Two firms that could be acquired by large firms because they address one or both of these issues are **Vodafone** and **NEXTEL Communications**.

Vodafone

Vodafone is the largest cellular telecommunications company in the United Kingdom, with a 57% market share. Its main competitor is British Telecom; a third player, Mercury (a joint venture between U.S. West and Cable & Wireless) is just starting up. This franchise is extremely attractive to a foreign firm that desires a solid franchise in the U.K. because new digital technologies will bring the price of wireless service down to a point where it can compete for the local residential customer.

A second factor makes Vodafone particularly attractive to a strategic buyer: it has alliances giving it access to the cellular market in thirteen countries outside the U.K.—major countries such as Hong Kong, Germany, Sweden, and Denmark. This is an extraordinarily valuable asset, because it is difficult to get into these markets, now that the spectrum has been allocated. VOD's business alliances with local telecom companies in these markets would give a firm such as AT&T an edge in selling equipment to them. They would also help AT&T provide seamless global service to its business customers.

Vodafone shares are now trading at 24 times earnings and 11 times cash flow for the year ending March '94, well below U.S. cellular firms, which generally trade at 20 times cash flow. Essentially, the public market is not giving credit to VOD for its international alliances, which are currently a drag on earnings. Jeffrey Hines believes an acquisition or partial acquisition would be valued at 15-20 times cash flow, based on current U.S. cellular valuations. Which firms might be interested in an acquisition or joint venture? It would probably be a large telecommunications player that brings something of strategic importance to the table—advanced technology, telecommunications expertise, or the capital needed to aggressively develop the non-U.K. business. Possible candidates include AT&T, NTT (which is investing in NEXTEL), DDI (the "MCI of Japan"), or Sprint, but probably not MCI which is partially owned by British Telecom.

NEXTEL Communications

This company is in the early stages of becoming a provider of cellular service in the ten largest U.S. markets, or about 72% of the U.S. population. In these markets it will be one of three players (NEXTEL plus two cellular operators) in a booming business, but additional competitors will be appearing in the late 1990s as the FCC allocates spectrum to "PCS" (personal communications services) firms. NEXTEL, which has powerful partners such as Motorola and Matsushita, has a digital state-of-the-art wireless network that provides not only voice service but also paging

and data transmission. CALL resembles Vodafone in that it has a superb franchise that is difficult to replicate, but differs from VOD in that it is not a profitable, well-entrenched company but rather a high-quality venture capital situation. CALL switched on its first cellular system, for the Los Angeles market, a few months ago and expects to offer commercial service soon.

In the opinion of Jeffrey Hines, two types of deal make the most sense for NEXTEL. One would be acquisition by a telecommunications company, such as an RBOC. Today, when cellular penetration of the market is still a low 4-5%, cellular is a *plus* not a minus for the RBOCs because 99% of cellular calls reach the RBOC's local loop (e.g., when an executive on the way to the airport calls a colleague in the office, the local RBOC makes money). Today only 1% of all calls are cellular-to-cellular, but this will change when cellular penetration rises. Then the RBOCs, instead of dominating the local loop, will be *out of the loop*. Ultimately, wireless could do to the RBOCs pretty much what the truckers did to the railroads in the mid-twentieth century. To forestall this risk, it would make sense for an RBOC to buy NEXTEL.

A different type of deal would involve a partial acquisition of NEXTEL by a major U.S. firm with deep pockets, a national brand name, and expertise in consumer marketing—such as Apple Computer or Sprint. These companies could help NEXTEL solve one of its main problems—

high marketing costs. Like other telecom companies, NEXTEL's has high fixed costs. It is expensive to build and maintain a telecommunications network, but the incremental cost incurred in transmitting each individual call is small. Because it has high up front fixed costs, NEXTEL is *under intense pressure to rapidly build up its customer base to cover those costs*. The company cannot slowly roll out the network, so that cash flow from operations in one market finances expansion into another region, because NEXTEL has only a one to two year head start over the PCS firms that will be plunging into the wireless market.

Net-net, the company has to build the entire network and attract customers as quickly possible. Both activities cost a lot of money. Because NEXTEL has no national brand name and no marketing infrastructure, it must contract out the function of signing up customers. This is expensive—hundreds of dollars per customer. By linking up with a large national firm with a strong brand name, plenty of marketing expertise, and a sales network already in place, *marketing costs could be driven down to less than \$100 per customer*. That would be a big advantage to a capital-constrained firm like NEXTEL. Jeffrey Hines would not, however, expect a non-technology firm to take over NEXTEL completely.

Additional information is available upon request.

Prices of companies mentioned as of 12/17/93

A.L. Labs ¹ BMD \$13 3/4	Apple Computer ³ AAPL \$29 1/2	Box Energy ^{1,2} BOXXB \$11	Circuit City ² CC \$20 1/4
Abbott Labs ² ABT \$28 1/2	Applied Immune Sciences AISX \$9 5/8	Bristol Myers Squibb ² BMY \$58 7/8	Citizens Banking CBCF \$24
Advanced Magnetics ¹ AVM \$12 1/8	Applied Materials ³ AMAT \$34 1/2	British Petroleum BP \$62 7/8	Clayton Williams Energy ^{1,3} CWIE \$14
Advanced Tissue Sciences ³ ATIS \$9	Arco Chemical ² RCM \$43 1/2	British Steel BST \$19 7/8	Coca-Cola ² KO \$42 5/8
Aetna Life & Casualty ² AET \$59 7/8	Argus Pharmaceuticals ARG \$4 1/4	British Telecom ^{1,3} BTY \$71 7/8	Colgate-Palmolive CL \$60 5/8
Affymax N.V. AFMXF \$15 1/4	Arris Pharmaceuticals ¹ ARRS \$6	Broken Hill Prop ADR BHP \$45 5/8	Collagen Corp CGEN \$27 1/2
Agouron Pharmaceuticals ^{1,3} AGP \$9	Athena Neurosciences ^{1,3} ATHN \$8 1/4	Browning-Ferris ² BFI \$27 1/8	ConAgra Inc ² CAG \$25 1/2
Ahmanson (H.F.) ² AHM \$19 1/2	Baker Hughes Inc BHI \$19 1/8	Burlington Resources ³ BR \$40 5/8	Cooper Ind ² CBE \$48 3/4
ALC Communications ¹ ALC \$25 3/4	Ball Corp BLL \$29 1/2	Cable & Wireless ² CWP \$22 1/2	Copley Pharmaceutical CPLY \$38
Alkermes Inc ³ ALKS \$7 3/4	Banc One ² ONE \$39	Cadbury Schweppes ³ CADBY \$30 1/8	Corestates Financial ³ CSFN \$26 3/4
Allied Signal Inc ALD \$77 1/4	Bank America ^{1,2} BAC \$47	Cal Fed Holding ^{1,2} CAL \$13 1/4	Corvas Int'l ^{1,3} CVAS \$4 3/4
Alpha-Beta Techn. Inc ABTI \$28 1/2	Bank of Boston ^{1,2} BKB \$22 7/8	Cambridge Neuroscience Inc CNSI \$7	CPC Int'l CPC \$46 3/8
Alza Corp AZA \$28 1/8	Bank of New York BK \$57 3/4	Campbell Resources ² CCH \$ 5/8	Creative Biomolecules CBMI \$9
American Cyanamid ACY \$49 3/4	Bankers Corp ^{1,2} BKO \$16	Campbell Soup CPB \$42 1/8	Cross Timbers Oil ¹ CRT \$13 5/8
American Home Prods ² AHP \$62 5/8	Barnes & Noble BKS \$27 1/4	Caterpillar CAT \$86 3/8	Crown Cork & Seal CCK \$40 1/8
American Tel & Tel ^{1,2} T \$54 5/8	Barr Labs BRL \$20	Cell Genesys CEGE \$19 3/4	Curative Technology CURE \$6 1/8
Amoco Corp ² AN \$52 1/2	BayBanks Inc ^{2,4} BBNK \$48	CellPro ^{1,3} CPRO \$35 1/4	Cytel Corp CYTL \$4 3/4
Amrol ^{1,3,4} AMTL \$20 3/4	Baxter Intl ² BAX \$23 1/8	Celtrix Pharm CTRX \$10 3/4	Deere & Co DE \$71 5/8
Amylin Pharmaceut'ls AMLN \$10 1/2	Bell Atlantic ² BEL \$60 3/4	Centacor ^{1,3} CNTO \$12 5/8	Devon Energy DVN \$17 7/8
Anadarko Petroleum APC \$42 1/4	Bemis Co ² BMS \$23	Cephalon Inc CEPH \$16 1/2	Discovery Zone ZONE \$23
Andover Savings Bank ³ ANDB \$16 7/8	Biocraft Labs BCL \$20 1/4	Chase Manhattan ¹ CMB \$34 1/4	Donaldson Co DCI \$43
Anheuser-Busch Co. BUD \$49 1/8	Biogen Inc ³ BGEN \$40 1/2	Chemical Banking ^{1,2} CHL \$39 5/8	Dover Corp DOV \$60 7/8
Apache Corp ² APA \$22 3/4	Biomagnetic Techn ^{1,3} BTIX \$3 1/4	Chevron ² CHV \$84 7/8	Dr. Pepper/Seven-up Co ^{1,2} DPS \$24
	BioSurface Technology Inc BSSI \$3 1/8	CIGNA Corp CI \$64	Dresser Industries DI \$20 3/4
	BioTechnology General ³ BTGC \$5	Cincinnati Milacron CMZ \$20 5/8	DuPont ² DD \$49 3/8
	Blockbuster Entertain't ^{2,3} BV \$31 5/8		Eastman Kodak ² EK \$55 1/4

Eaton Corp ETN \$50 1/4	Johnson & Johnson ² JNJ \$43 1/8	Praxair Inc ² PX \$16 3/4	Upjohn Co ² URS \$30
Elf Aquitaine ELF \$35 5/8	Johnson Controls JCI \$54 3/8	Price/Costco PCCW \$20	Varian Associates VAR \$67 5/8
Elan PLC ELN \$40 7/8	K mart KM \$21 3/4	Procter & Gamble ² PG \$15 1/4	Vertex Pharm VRTX \$16 3/4
Enron Oil and Gas ¹ EOG \$38	LDDS Communic'ns ^{1,2} LDDSA \$44	ProCyte Corp PRCY \$14 1/2	Viacom ² VICR \$50 1/4
Exxon ² XON \$64	Lifecore Biomedical LCBN \$9	Purepac PURE \$17 3/4	Vodafone ² VOD \$84 7/8
Farrel ^{1,3} FARL \$4 1/2	Ligand Pharmaceut'ls LGNDA \$11 1/2	Quaker Oats ² OAT \$72 1/2	Wachovia Corp WB \$34
First American Corp ³ FATN \$29 5/8	Lilly (Eli) ² \$57 1/8	Repligen Corp ² RGEN \$7 1/4	Wainoco Oil ¹ WOL \$3 7/8
First Fidelity Bancorp FFB \$46	Limited ² LTD \$17 5/8	Repsol REP \$29 7/8	Wal-Mart ² WMT \$27 1/2
First Interstate ¹ FII \$64 1/4	Litton Indus LIT \$66 1/2	Republic Pictures ² RPIC \$12 5/8	Warner-Lambert ² WLA \$64
Fleming Cos FLM \$26	Live Entertainment LVE \$1 7/8	Rockwell Int ¹ ROK \$38 1/2	Watson Pharmaceuticals WATS \$25
Food Lion Inc ³ FDLNB \$6 1/8	Louisiana Land & Expl. ¹ LLX \$38 1/2	Royal Dutch ² RD \$104	Weis Markets WMK \$27 7/8
Ford Motor ^{1,2} F \$62 5/8	Magainin Pharmaceut. MAGN \$11 5/8	RTZ Corp plc ADS RTZ \$46 7/8	Wellcome ² WEL \$9 3/4
Forest Labs FRX \$45	Marion Merrell Dow MKC \$18	Safeway Inc ^{2,3} SWY \$19 1/2	Westinghouse Electric ² WX \$13 7/8
Forest Oil ^{1,3} FOIL \$4	Marlton Technologies MTY \$1 3/8	Sante Fe Energy ² SFR \$9	WMX Technologies ² WMX \$27
Genentech Inc ^{1,2} GNE \$48 3/4	Marsam Pharmaceut. MSAM \$21 3/8	Scherer (R.P.) ^{1,3} SHR \$35	YPF ² YPF \$24 3/8
General Electric ² GE \$105 1/8	Matsushita El ADR MC \$139	Scios Nova SCIO \$8 1/2	Zenith Laboratories ² ZENL \$23 1/2
Genetics Institute ³ GENIZ \$48 1/2	Maxus Energy ² MXS \$4 3/4	Sealright Co ³ SRCO \$14 1/2	
Gensia Pharmaceut'ls ^{1,2} GNSA \$25 1/4	MCI Communications ³ MCIC \$26 1/2	Shamen Pharmaceut SHMN \$10 1/2	
Genzyme Transgenics ¹ GZTC \$7 3/4	Merck & Co. ² \$33 5/8	Shawmut Nat ¹ SNC \$21 1/2	
Gerber Products GEB \$28	Meridian Bancorp MRDN \$28 7/8	Smith's Food & Drug SFD \$20 3/8	
Gerrity Oil & Gas ^{1,2} GIB \$11 5/8	MGM Grand MGG \$38 3/4	SmithKline Beecham SBH \$30 1/8	
Giant Food GFS.A \$25 1/2	Midlantic Corp ^{1,3} MDIL \$23 7/8	Snyder Oil ¹ SNY \$16 1/2	
Giddings & Lewis ³ GIDL \$25 1/2	Mobil Corp ^{1,2} MOB \$74 5/8	Sonoco ³ SONO \$21 3/4	
Gilead Sciences GILD \$11 1/2	Monsanto ² MTC \$72 1/2	Sony ² SNE \$50 1/2	
Gillette ² G \$60 1/2	Moorco Int ^{1,3} MRC \$18 1/4	Spec's Music ^{1,3} SPEK \$8 1/4	
Glaxo Holdings ² GLX \$20 7/8	Musicland Stores MLG \$23	Spelling Entertainment SP \$9 1/4	
Glycomed Inc GLYC \$7	Mylan MYL \$23 3/4	Sprint Corp FON \$32 5/8	
Great Western Financial GWF \$19 1/4	National City Corp NCC \$24 7/8	Sundstrand Corp SNS \$41 5/8	
Halliburton HAL \$30 3/8	National Medical Ent. ² NME \$14	Super Food Services ² SFS \$13 1/8	
Halsey Drug HDG \$4 3/4	Nationsbank ² NB \$49 1/2	Supervalu Inc SVU \$35	
Hanson PLC ² HAN \$20 1/4	Navistar Int'l NAV \$23 1/8	Syntex ² SYN \$15 5/8	
Harnischfeger Indus HPH \$23 7/8	Neurogen NRGN \$6 1/8	T-cell Sciences Inc ³ TCEL \$7 1/2	
HealthSouth Rehab HRC \$22 3/4	News Corp NWS \$54 7/8	Telecommunic'ns ^{1,3} TCOMA \$29 5/8	
Heinz (H.J.) ² HNZ \$35 5/8	Nextel Comm ^{1,3} CALL \$36 1/8	Tenneco Inc TGT \$50 7/8	
Helene Curtis HC \$26 1/8	Noble Affiliates ³ NBL \$24 1/2	Tetra Technologies ^{1,3} TTRA \$6 7/8	
Hershey Foods HSY \$50 1/4	Organogenesis Inc ORG \$7 7/8	Teva Pharm Indus TEVIY \$27 1/4	
Hewlett-Packard ² HWP \$77 7/8	Oryx Ene ^{2,3} ORX \$16 3/4	Texaco ² TX \$63 3/8	
Home Depot ² HD \$40	Paco Pharmaceut. ^{1,3,4} PACO \$10 7/8	Tide West Oil Co ² TIDE \$8 1/4	
Hospital Corp Am ² HCA \$33 7/8	Paramount Communi. ² PCI \$81 5/8	Time Warner ² TWX \$44 1/2	
Huntington Bank ³ HBAN \$22 3/8	Parker & Parsley Petrol PDP \$22 5/8	Titan Wheel Int ^{1,3} TWII \$23	
i-STAT ^{1,3} STAT \$15	Parker-Hannifin PH \$36 3/8	Total Petroleum TPN \$26 7/8	
ICO ^{3,4} ICO \$6 1/2	Penn Traffic PNF \$35 3/8	Trans World Music ³ TWMC \$15	
IG Labs IGLI \$6 1/2	PepsiCo ² PEP \$40 7/8	Travelers ^{1,2} TIC \$31 3/4	
IMCERA Group IMA \$33 3/8	Perrigo Co PRGO \$32 1/2	TriMas Corp ¹ TMS \$23 1/4	
Immunex Corp ^{1,3} IMNX \$15 7/8	Pet Inc ^{2,3} PT \$17 1/4	Trinova Corp TNV \$32 1/2	
ImmunoGen Inc ^{1,3} IMGN \$9 1/2	Pharmaceuticals Resources PRX \$16 7/8	Triton Energy ^{1,2} OIL \$28 3/4	
Inco Ltd ² N \$25 3/8	Phillips NV ³ PHG \$20 1/2	Turner Broadcasting ² TBS.A \$25 1/4	
Indresco Inc ID \$14 3/8	Phillips Petroleum ³ P \$27 1/2	U.S. West Inc ² USW \$46 5/8	
Ingersoll-Rand IR \$37 3/4	Plains Petroleum PLP \$22 3/4	Unilever ² UN \$115	
Int'l Business Machines ² IBM \$59 3/4	PNC Bank Corp \$29 7/8	Union Pacific UNP \$60 1/2	
Interneuron Pharmaceuticals IPIC \$9	Pogo Producing ² PPP \$15 1/8	United Waste Syst ^{1,3} UWST \$15 1/4	
Isis Pharmaceuticals ¹ ISIP \$6 1/8		Univax Biologics Inc UNVX \$8 1/2	
IVAX Corp ^{1,2,3} IVX \$26		Unocal Corp ² UCL \$26 1/4	

¹PaineWebber Incorporated has acted in an investment banking capacity for this company.

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December 19, 1993

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