

# RECORD, Volume 24, No. 2\*

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Maui II Spring Meeting  
June 22–24, 1998

## Session 59CS

### Let's Make a Deal: "Life and Health Mergers and Acquisitions"

**Track:** Actuary of the Future/Health  
**Key words:** Mergers and Acquisitions, Life Insurance, Health Insurance

**Moderator:** WILLIAM R. HORBATT  
**Panelists:** CHARLES CARROLL  
HERBERT E. GOODFRIEND†  
**Recorder:** WILLIAM R. HORBATT

*Summary: With all the merger and acquisition activity in the life and health insurance business, every actuary needs to know how deals are made. This session uses a case study to illustrate the process to buy or sell either an entire company or a block of business.*

*Particular emphasis is placed on the contributions nonactuaries make to the process. Attendees are presented with a real life situation to analyze in smaller groups.*

*During this session, attendees "experience" a deal and develop an understanding of the challenges in an actual merger or acquisition.*

**Mr. William R. Horbatt:** Charles Carroll is the managing partner of Ernst and Young's merger and acquisition practice. Herb Goodfriend is a managing director of KPMG Peat Marwick's capital markets insurance group. I'm just an average run-of-the-mill consulting actuary.

We're going to start out talking about valuation theories. How do you set a price for a deal? That's going to be important to you, in an indirect sense, because we are going to divide the audience into groups to do a case study. Half of you will be buyers, and half of you will be sellers. We're going to give you an actual case of a

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†Mr. Herbert E. Goodfriend, not a member of the sponsoring organizations, is Managing Director of KPMG Peat Marwick LLP in New York, NY.

company, and it's going to be your objective to cut a deal. Each of the groups will explain the deal they cut.

Let's start out with the valuation theories we're going to be talking about. We're going to talk just for a few moments about the discounted dividend stream model, which is the theoretical approach to valuing a company. Herb is going to discuss the various models that security analysts use to set a value for a company or for a deal. I'm going to talk a bit about actuarial appraisals. Charles Carroll has a very interesting discussion on GAAP earnings, how an evaluation of GAAP earnings can affect the negotiations of a purchase price. If time permits, we may get into buyer and target characteristics.

As I mentioned, we're going to have a case study, team presentations, a critique and a conclusion. Actually, the nice thing is, there is no such thing as a real critique because there is no right answer. It's fun to talk about the reasoning that you used to get to your end point.

Half of you are going to be representing CIGNA, and the other half will be Health Source. In fact, CIGNA did acquire Health Source. There is some nice market data, if you're actually thinking about doing a deal. All this information on current insurance stock summaries, recent mergers and acquisitions, capital market issues, and some life industry statistics could be quite helpful. We have a copy of an actual actuarial appraisal. This was from the Equitable of Iowa, and it's a very good appraisal. It came off the Internet, so it is public information. There is a sample offering memorandum. If you're ever involved in selling a company, both of these are issues that you're going to get involved in. You will normally have to either prepare or have prepared an appraisal, and you'll always have to, in essence, create an offering memorandum that tells the story of why somebody should buy you. Alternatively, if you're on the buy side, you'll frequently see these items.

The first valuation theory is the discounted dividend model. The theory behind this is that the value of the company equals the present value of future stockholder dividends. In essence, it's an annuity in perpetuity. It is a function of adjusted current earnings, how much your earnings will grow in the future, uncertainty, and the discount rate. One would think that this is really just a simple theory-of-interest problem.

I took an example of a company with \$1,000 of earnings after tax, a 50% dividend payout, and a 4% growth rate. If I discounted it at 6.5%, I'd get a \$20,425 value. The price-to-earnings (P/E) ratio is 21.2. That's comparable to the ratios that were in the market a couple weeks ago. It's high for a company in the life and health insurance industry, and in this case, the earnings yield is almost 5%, and the

dividend yield is half that. The growth and discount rates are directly related to keep the same P/E ratio. Each time that you raise your growth rate, you're raising your discount rate. In some sense, I get a discount rate of 10.7%, which is something you'd probably feel comfortable with for discounting future earnings. The current market is really anticipating about an 8% growth in earnings. Now I'd like to turn it over to Herb, and he'll talk a bit about the various methodologies that the stock market analysts use to set a value.

**Mr. Herbert E. Goodfriend:** Somebody once said, define an analyst. In good markets, who wants them? In bad markets, who needs them? Security analysts take a lot of abuse, and it is probably justifiable. One thing they do is hawk management and try to extract information, almost religiously, and they use some frames of reference that are actuarially sound, but they often end up being judgement calls.

The archdeacons of the insurance analyst business were Mr. Dodd and Mr. Graham, who wrote a text on how to analyze securities, and their chief devotee is Mr. Buffett. He read their book and used it as recently as this week. They believed that the present value of future earnings was manifested in the dividend. When it comes to analyzing the insurance business, there are several parameters that you should remember. For both good reasons and vague reasons, financial stocks, in a generic sense, tend to sell at sharp discounts from other industries, even if they have the same growth rate, strong balance sheets, brand identity, and the like.

There are some very good, albeit fuzzy, reasons for continuing discounted perception of the business. There is a view that it's an industry that is very complex, that its products are not something the public wants or is forced to buy, and that it's heavily regulated. What is most telling of all is it is very interest-rate sensitive, both in terms of the balance sheet, the income statement, the dividend that's paid, and of course the characteristics of the policy. That applies to property/casualty, health insurance, and life insurance. In recent years, it has also been very much sensitive to the consumer plaintive cries of mistreatment, market conduct issues, and the like.

Growth characteristics also varied quite a bit. The property/casualty side is quite cyclical. Three to five years ago, the health insurance side was quite cyclical in the way in which there were three years up and three years down. You could almost measure it on a graph. The life insurance industry, on the other hand, was less cyclical, but these industries shared some common characteristics across the board for each of these three main subsectors; that is to say, with rare exception, the returns on equity did not make for pleasant reading. It was not usual to find a company that had high double digits. Indeed, in most cases, you'd have high single digits. It was only at the top of the curve of a property/casualty cycle or at a health

insurance cycle that returns made for more pleasant reading. Those were a notable exception. Therefore, the industry traded as either a surrogate for the stock market or the bond market, buying assets at a discount or a premium from whatever their intrinsic values were or for their yields.

In the case of the property/casualty business, the yields were much more compelling than they were in the life or the health side. There was more money to pay out, and it was less capital intensive. That is also a characteristic that separated them from the pack. All three industries thought they didn't need capital.

Dividends mean less today than they did before. Most American managements have accepted the tenet that it's better to plow back earnings and use them for internal growth, or to buy your own common stock, or to distribute them in some other way, than pay it on a continuing dividend basis. That is because the yields don't make for good reading.

P/E ratios are all over the lot. For most parts of the insurance industry, P/E ratios don't have the compelling relationships that they do in many other businesses, unless they are taken, among other things, as measurements against their own group. There are sharp discounts from the Standard & Poor's (S&P) 500, the Dow Jones, and other generally accepted industry indexes that you would use. These discounts can vary by as much as 25–50%. It is rare to find an insurance company stock life or health that sells at 20–25 times earnings. But even that would make it at a discount from the S&P, which is now at 23–25 and counting. It's even more important to recognize, when you get to a deal, and that's on a going-concern basis, that P/E ratios are very suspect.

Moreover, so much of an insurance industry's income relies on a judgement call. Do I release reserves and make my earnings look fatter than they are, justifiably? Do I understate my earnings because of some nonrecurring characteristic? In the case of both life and health insurance companies, to what degree do they include or exclude capital gains, realized or unrealized? Most analysts who follow the insurance industry tend to exclude realized capital gains from measuring either the P/E ratio or the relative return on equity that a company has. I count myself in that school. That penalizes companies that do a very good job in the investment function. The thesis is that I, as the stockholder or policyholder, do not give you my money to be an investment vehicle. I want you to be the most efficient, highest earning company on the block, and therefore I will reward you for operating earnings (as defined by excluding nonrecurring characteristics) and realized capital gains.

Contrast this with price-to-book ratios. These are far more important, not only in an operating sense, but more importantly, in a compelling deal sense. This is what

you're going to be talking about, but it is significantly less worthy of consideration in a health insurance company, where so much of the balance sheet is goodwill, looking forward, rather than hard assets on the balance sheet these days. Nonetheless, the buyer can have an important book-value relationship. The degree to which a stockholder holds a company in high repute is measured by the premium that it will sell above stated book value, and that's GAAP book value, as Charles will discuss in due course, not statutory. Statutory is important. The rating agencies use statutory, as do some analysts, to figure out cash flows and how much dividends can be paid. But when push comes to shove, transactions center on book value as measured by GAAP. Perhaps recognizing that the industry carriers have relatively low P/E ratios and relatively low premium-to-book value with rare exception, they tend to focus on the compounded rate of annual growth, not in volume, and sometimes not even in earnings, but in the accretion to aforementioned book value. Does it outpace your needs for capital? Does it outpace what your peer group does? Does it outpace what the S&P 500 does? A company growing at 5% a year but accreting 6% or 7% to the bottom line, because it is more efficient, and has earnings from realized gains and the like, will tend to carry somewhat more prestigious perceptions than another.

The trap in this is that you have to satisfy several constituencies, and the analyst is increasingly aware of this. Not only does the analyst and the company have to satisfy their stockholders, but they have to satisfy regulators, on the one hand, rating agencies on the other, and the outside public. The rating agencies don't like it if a company grows too rapidly. They define what is too rapidly, but you can't get a definition from them. It's very difficult to state. The rule of thumb is that if you grow several times the rate that the industry is growing at, you turn on alarm buttons. On the other hand, if you don't grow at all, you're penalized because they construe you to be in runoff position. So there has to be a happy middle ground between these two. If you grow too rapidly, the regulators won't like it because they'll worry about how much capital you need. If you don't grow at all, they'll worry about you not really making a marketing effort and living off the past.

Of course, the rate of return is important, too. If you look at reinsurers, specialty companies, and the like, you'll find relatively satisfactory rates of return that are below those of the S&P and Dow Jones, but they are higher than the broad generic group of insurance companies. For five or six years, the health insurers really were happy campers in this respect. They had high double-digit returns. Those are gone now for reasons we will explore. It was rare for most life companies to get above 9%, until the last 2-3 years. They're now at around 12% or 13%. There are people who think a whole new paradigm is at hand. You're going to have high double digits, or at least modest double digits, indefinitely. If you believe in that, you probably believe in the Tooth Fairy.

The historical pressures against the insurance industry earning high returns for a sustained period of time are very telling. It's even more prevalent in recent years against the health insurance industry. There are those who believe that one plus one equals a multiple thereof. If you put together a well-run company and a mediocre or modest company, I can improve that company so that my return and its return will, in due course, be higher. Analysts look at GAAP rates of return on equity. You can calculate the equity based on the latest 12 months, but the important thing is not to take just one year. What's the trend over a reasonable time? That typical time is 3–5 years.

**Mr. Horbatt:** Actuarial appraisals have become relatively important in the life insurance industry. They've gone over and become important in segments of the health insurance industry. They will be very common if you're writing long-term care insurance, and if you're writing disability insurance. However, if you're in the medical field, they are of lower value, and we can talk about the differentials and how they're done differently for a medical care provider, whether it's a managed-care operation or a regular indemnity-type insurer. We take a company and we ask where its value comes from? It comes from numerous places. One is adjusted surplus.

The next issue is the present value of future profits on existing business. After that, we put some value on new business, on the existing structure of your company, and what can it produce in the future. Finally, there's potential expense savings. Companies are frequently sold, particularly smaller companies because they aren't growing fast enough. Their overhead expenses are growing at a faster rate than their revenue on new sales. If that company is acquired and various actions are taken, there will be expense savings.

### **Adjusted Surplus**

You're working off the statutory balance sheet, and your invested assets will all be marked to market. You'll take certain nonadmitted assets that actually do have value, and add them in.

### **Target Surplus**

The trend has been to deduct target surplus from the adjusted surplus figure and move it over to your present value of future profit calculation. Basically, that surplus is used to fund the risk related to that existing business; therefore as that business runs off, you will distribute that targeted surplus back into earnings.

### **Surplus Release**

There are instances where companies have reinsurance and surplus relief that they really don't need. In that case, you would assume that it has been recaptured, so

that you don't pay for it. There are other cases where the company is financing its block of business, through reinsurance. In that case, it may be appropriate to include the effect of reinsurance in your actuarial appraisal. If there's a notable cost to it, however, a seller might still ignore it. They may go under the assumption that a new carrier or a buyer has adequate target surplus and will not need that surplus relief.

### **Tax Adjustments**

Once you've made all these adjustments up above, it will have a tax effect. If you create, in essence, additional value, that value, as it's earned through the income statement, will create a taxable event.

### **Interest Maintenance Reserve (IMR) And Asset Valuation Reserve (AVR)**

I think there's a trend now to take at least the AVR and bring that into your present value of future profits calculation. The IMR is not normally dealt with to a great degree. The simplest thing is to add it back to surplus.

The present value of future profits is a straight discounted cash-flow analysis, where the actuary projects the statutory profits (the money that's available for distribution each year into the future). They include the release of target surplus. The typical actuarial appraisal will discount the stream of future distributable income, using several interest rates. In this environment, you might use 8%, 10%, or 12%. I think one of the ideas is you're not trying to set the discount rate, because that's really related to the buyer's perception of risk. You give the buyer a potential range. You hope they're looking at the low end, but in truth, they're looking at the high end. You could also determine a discount rate using your cost of capital. If, for example, the typical mix in the industry was 50% equity (where you're paying 3%) and 50% bonds debt (where you're paying 6%), then your cost of capital and the right discount rate in that instance would be the average of the 2% or 4.5%.

### **Assumptions**

When you're doing a projection of future profits, your assumptions are realistic, or at least you purport them to be realistic. You don't have margins for adverse deviation like you would in GAAP. You may break out excess expenses as a separate item, and overhead would be such an expense. Your marketing expense wouldn't be included in your present value of future profits on the existing business. It would be included with your new business. For new business, you do the same kind of calculation. The difference is you're using hypothetical sales levels. You might use a higher discount rate to reflect the higher uncertainty. We have found that the buyer will view this with skepticism, for certain companies, and for other companies, it gives it fairly high credibility. In the Equitable of Iowa deal, the buyer gave it a high credibility. However, if you had a small company that really wasn't

going anywhere, and CONSECO was going to buy it, it probably wouldn't put any value on this component.

**Mr. Goodfriend:** In this respect, it's not too dissimilar from an analytical approach that the security analysts and rating agencies use on projections, such as best-case, model-case, and worst-case analysis. The conservative person would probably use the model-case or the worst-case analysis. The worst-case analysis is typically used for solvency. If things don't work out at all, what am I left with at the end of the proverbial day?

**Mr. Horbatt:** Another thing that happens, if you're dealing with a company like a medical company, is it won't do 30-year or 50-year actuarial appraisals. It might do one for a short period of time, such as three-to-five years. Then it will calculate the residual value of the company, applying one of the security analysts' ratios to a price-to-book value or a price-to-earnings ratio in year five. Then it would discount that back. The idea behind that is that the future is relatively uncertain with short-duration coverages.

Appraisal expense savings is a perennial favorite. Your total company expenses are maintenance expenses, acquisition, and overhead. Maintenance is included in the present value of future profits, acquisition is included in new business, and overhead is the balancing item. If they are excessive, which they normally would be due to the lack of economies of scale, you'd normally write them off over several years. If, however, you had some company that was just encountering blockbuster growth, you probably would expect to have relatively high fixed expenses and overhead expenses in the beginning, as it's ramping up. You may not run them off. By leaving them level, you'll have the desired effect.

Now, here are some other issues. One of the things that is happening in the area of interest-sensitive products is there has been a clear movement to using stochastic approaches, where you're doing multiple interest scenarios, and you're taking the average of them. However, if you were in a situation where you had a significant amount of interest-sensitive business in your block, then you would use this approach of a stochastic projection. In your appraisal, you'd probably have some detailed projections. If you've run 100 stochastic interest scenarios, you wouldn't show 100; you'd just pick one.

However, in the health fields that is less compelling because the policyholder behavior isn't influenced by the interest rate. You can lock in. If it's a longer duration coverage, such as a long-term disability, you can lock in a reasonable interest rate for your existing reserves right now.



Now I'd like to turn it over to Charles Carroll, who's going to talk about the effect of GAAP earnings.

**Mr. Charles Carroll:** Bill's and Herb's presentations focused on approaches to valuation (which you could say focus on the target company itself), and try to derive an analysis of value by looking at that company in isolation. Bill explained potential expense savings. You might have been looking at the intrinsic value of the company. What is its revenue generation and profit generation capability. The security analysts' approaches also look at companies, whether it's for purposes of pricing a company in the public market or for purposes of pricing a company in a private acquisition deal. Comparison methods that are used are trying to evaluate this target versus other alternative targets that are out there in the marketplace.

This next section, as opposed to focusing on the company in isolation, focuses on what an acquisition will do to the stock price of a combined entity. This is an important issue in acquisitions, one would even say that most significant acquisitions involve public companies, particularly public companies as buyers.

By the way, just by show of hands, how many here work for companies that are publicly traded? There's a pretty good representation. Some of this may be rather basic, but in any event, the truth of the matter is that in many acquisitions the acquirer is a public company. For those companies, one of the most important factors in making the acquisition is trying to do an analysis of what effect that will have on the company's public market value, which is what we're going to be talking about. After all, the executives who run these companies are primarily incented, and most of their compensation is based on what happens to the stock price of their company. When they are trying to make a buy decision, it's natural for them to focus on what will happen to stockholder and shareholder value.

Stock prices are heavily dependent on performance based on GAAP income. I think Herb made this point loud and clear. There are lots of different ways of looking at GAAP results. There are GAAP returns on equity, price-to-book ratios, and all sorts of other things. The most common profitability indicator used in the market is the P/E ratio. That is the statistic that is listed in *The Wall Street Journal* in the tables every day. We recently found at least one company with a somewhat spurious number in *The Wall Street Journal*, but that's what is quoted. P/E ratios, particularly in this industry, don't have a great tendency to converge for a specific sector of the industry. They also tend to be lower. I say that with respect to companies that are more in the traditional insurance company mold. The P/E ratios for some managed care companies are quite heady, and do not look as good as a technology stock, but some of them rival that kind of level. Nonetheless, P/E ratios are critical factors.

So if management is primarily concerned with what the acquisition is going to do to its company's stock price, one of the things it would want to know is what is it is going to do to earnings because that's going to factor into a value change based on the P/E ratio multiple. If I can do a deal where my earnings per share goes up, assuming my P/E ratio stays constant, I'm going to drive up my stock price, and thus create value for my shareholders, and probably get rewarded, in terms of compensation, for doing that. If the P/E ratio multiple actually goes up, that's even better. You get a double bang for the trouble of doing the acquisition. This often happens, if the market perceives the acquisition as being something positive. The markets do view acquisitions in the health care industry and the insurance industry as a positive phenomenon. There's a view that there is a need for consolidation in these two industries.

There's a perception that there are great amounts of expense savings that can be incurred. In the health care industry, massing of membership, particularly massing of membership in limited geographic regions, is perceived to give the acquirer better leverage against providers. If an acquisition has a nice strategic rationale that can be projected to the market, not only can it be accreted on the earnings per share basis, but it can actually drive up the market's perception and increase your P/E ratio. Our case study will show that that actually did happen.

If you ever read an announcement, or a press release where the management of a public company is announcing a deal, there will almost always be a statement by the CEO to the effect that this acquisition will have a positive impact or an accretive impact on earnings per share, beginning from day one, or one year after. Basically, the CEO is saying, "You'll like this deal because it will drive up our stock price."

What does the CEO mean, and what does it mean to have an acquisition be accretive to earnings? It means that earnings per share will be higher than it would otherwise have been. Three things control that. One is the GAAP earnings of the acquired entity after the acquisition. What sort of marginal contribution to earnings will the new acquisition make? Another important element is the currency used for the acquisition. There are different effects, depending on whether you issue new stock to the seller versus whether you pay for it in cash. If you pay for it in cash, how did you raise the money to pay for it? Did you sell some of your bond portfolio? Did you use cash that you had in your portfolio or did you issue debt? If you issued debt, what kind of debt was it and what was the interest cost? Were there convertibility features in the debt?

So what determines GAAP earnings of the acquired entity after the acquisition is going to be critical. The first thing you have to do is figure out whether you have a purchase or a pooling transaction. The classic pooling transaction occurs when two

shareholder groups throw in their lot together, both take stock back after the deal, and two companies merge. It is a merger, so to speak, of stockholder interests, although legally there are many mergers that are accounted for as purchases. A very classic pooling would be when two mutual companies merge, and obviously the policyholders have an interest in a combined company.

A purchase involves the acquirer buying the assets of the other company and using them in his business. Very few transactions are accounted for as poolings because the SEC doesn't like pooling. It doesn't like pooling because, in pooling accounting, you just add the two companies together, and let them go forward. There's no reconfiguration of the balance sheet; assets are marked to market; goodwill isn't created; and so on. So there are some large transactions that are accounted for as poolings, but they are few and far between. The Citibank Travelers deal, for example, is going to be a pooling, and it is one of the largest deals ever. But more than 90% of the deals are accounted for as purchases.

If you do a pooling, obviously, you can look at the trends of the two companies' profit and make reasonable projections. There might be some adjustments for expense savings and costs of integrating the two companies that will sort of cause blips in the trends. If you have a purchase accounting, you completely reconfigure the balance sheet. You mark all the assets of the acquired company to market. To the extent you paid something more than the tangible market value of the net assets, you record goodwill.

The amortization period will have to be negotiated with the auditing firm, but that is going to cause some reduction in your earnings. If you have long-term business in your acquisition (such as disability business, which would typically be considered long-term, even if it was group disability), you'd also record a special asset called value of business acquired.

**Mr. Horbatt:** The components of your actuarial appraisal can be very useful if you're an acquirer or a potential acquirer of a company. You can estimate the way your balance sheet is going to look at a particular purchase price.

**Mr. Carroll:** That's because the actuarial appraisal will give you a basis for determining this value of business acquired, which is just the future profits on the business that you bought.

**Mr. Horbatt:** There is also the marking of assets to market.

**Mr. Carroll:** If you do have deferred acquisition costs on your balance sheet, you write them off. In many cases, health companies will not have any deferred

acquisition costs. In purchase accounting, which is going to be the case in most situations, you can't just take the company's reported historical GAAP earnings and leap to an estimate of what they're going to look like after the purchase. You have to go through this analysis of marking balance sheet to market.

There's also another phenomenon we see in acquisitions, which is the restructuring charges. You can see these in either poolings or purchases, and there is some sensitivity on this. The SEC is not too happy with restructuring charges. You would see a restructuring charge in the case of a health company, to possibly boost up claim reserves, for example, to reflect some deterioration. The reason the SEC doesn't like that is that the implication is that the prior reserve balance was incorrect. It's sort of saying that the company's financial statements prior to purchase were misstated. Nonetheless, you do see a lot of restructuring charges, which are probably more common in property/casualty companies.

Restructuring charges can also relate to things other than just reserves. They could relate to closing down operations and other factors. The basic point of a restructuring charge, though, spoken from a skeptic's point of view, is it's a way of setting yourself up for better earnings in the future, because it's a charge against the balance sheet at the time of the acquisition. The charge doesn't go through earnings, but the reversal does go through earnings.

We're going to go through some fairly simplistic, but I think revealing, scenarios with respect to a hypothetical purchase. We will see how the dynamics of the purchase price and the earnings-per-share numbers flow through a typical acquisition. We are going to look at it on the basis of the company being purchased for cash on hand, purchased for stock, and purchased for cash raised through a debt offering. There are three scenarios. In all three, Company A is the acquirer, and Company B is the target or the acquiree. There are some basic statistics. It's a little simplistic. One of the basic assumptions is that Company A's P/E ratio is going to stay constant throughout this. If we find value adjustments based on this P/E ratio being constant, then the next level of complexity would be to try to model what happens to a P/E ratio. If the market views the strategic rationale for the acquisition as being positive, the P/E ratio will actually go up. If it views the strategic rationale as not being compelling, they'll punish the company by having a lower P/E ratio. In most cases, companies that are acquirers have a pretty good view of what the market's going to view positively and negatively.

Company A is a company with GAAP equity of \$2,500. It has 100 shares outstanding. It has GAAP net income of \$375, so its return on equity, which I've simply taken as a ratio of \$375 to \$2,500, is 15%. Its earnings per share is \$3.75, which is \$375 divided by 100 shares. We are postulating that the P/E ratio multiple

will be 15.4. The share price is \$57.75, which is the 15.4 times the earnings per share of \$3.75. The market capital is \$5,775, which is just 100 shares at \$57.75. So those are all sort of constants.

Why did we pick 15.4 as the P/E ratio? It wasn't chosen completely randomly. It was basically based on this formula:

$$\begin{aligned} P/B &= 17.612 (\text{ROE}) - 0.328 \\ \text{ROE} &= E/B \\ P/E &= 17.612 - 0.328 (B/E) \\ \text{ROE} & \qquad \qquad \qquad 15\% \\ P/E & \qquad \qquad \qquad 15.4x \\ P/B & \qquad \qquad \qquad 231\% \end{aligned}$$

This formula relates the price-to-book to the return on equity (ROE). The ROE is sort of a measure of profitability. How is the company doing with respect to providing return on its current equity? The price-to-book ratio, as Herb said, is sort of a key indicator of how the market views the company. A high price-to-book ratio indicates a premium. If you have a ratio over 100%, the market is saying this company has some value above its pure book value. If you have a number less than one, it's saying that the company is probably destroying value. This is a relationship developed by Goldman Sachs in a study that was published last year. It's primarily based on life insurance companies. For algebraic purposes, the price-to-book ratio equation can be converted into an equation for the price-to-earnings ratio because the ROE is just the earnings to the book value, so if you do the manipulation algebraically, you come up with this equation. There are some interesting things about that. It's based on observations of actual market prices at a particular time and actual return on equity over a period of time for a group of large companies.

**From the Floor:** The 17.612 is not related to Company A is it?

**Mr. Carroll:** No it is not, although we used it. We assumed Company A fit into this formula because if you take Company A's ROE and run it through this formula, it comes out with a P/E ratio of 15.4, which is what we've used. It's not atypical for an insurance company. Insurance companies tend to have low P/E ratios. This formula, in fact, implies that you have a maximum P/E ratio of 17.612, because if E over B is infinite, the second item is 0, and you'd get a P/E of 17.612. It can't be higher than 17.612, which is an interesting thought. Obviously, a lot of companies do have P/E ratios over 17.612, but it's sort of an indication that life companies do tend to have this lower strata of P/E ratios.

**Mr. Goodfriend:** Contrast this, if you will, with a going concern, nondeal-orientated value judgement of a company's stock selling at one times its growth rate

in per-share earnings. That's why technical stocks are 40–80 times earnings. But that's not the case here. In theory, there's no limit in one times the growth rate. You can grow at 40–60% compounded. This stock is limited by 17.612, regardless of what you earn.

**Mr. Carroll:** It means that if your earnings are too high, the market is saying, either don't believe the earnings or you can't grow them. Something is wrong.

**Mr. Horbatt:** It's also saying, take your book value down to zero, and distribute all your profits.

**Mr. Carroll:** It still comes out with a price-to-book ratio of 231, which is fairly typical.

Managed-care companies, at least until recently, could have P/E ratios that are double or triple this number. Some of them have come down from those lofty positions. In fact, our target company came down from a very lofty position; but they go outside of these ranges. Nonetheless, the mathematics here still work.

Company B is a smaller company than Company A. It's about 20% the size of A in terms of purchase price versus GAAP equity of Company A. Company B has a projected purchase GAAP (P-GAAP) ROE of 8%, yielding P-GAAP net income of 40, and that's 8% after tax, so Company B is projected to make an 8% return the first year after the acquisition. Eight percent is kind of low. I would consider that unacceptable over the long term, but when you do P-GAAP, sometimes the effect is to get a depressed early-year income. One of the reasons is the drag that goodwill amortization puts on the company. There might also be transition costs that will drag down the earnings. In any event, we are postulating this as being the case for Company B.

What happens, mechanically, with stock price and earning per share if Company A acquires Company B with cash that it already has on hand or by liquidating investments in its investment portfolio? The first thing we have to do is figure out what the net income is going to be. Company A's net income was \$375. It's bopping along at its nice 15% ROE, which is after tax as well. Company B's P-GAAP net income is \$40. However, we've gotten rid of \$500 worth of investable assets that generate some investment income, so our earnings are going to be down by that amount. I've assumed a 5% after-tax interest rate on the \$500, so that gives us a negative \$25. We're going to have a net income, including the purchase, of \$390. We have an improvement because we're earning 8% after-tax on the acquisition price of \$500 versus 5% after-tax, which is what we were earning with

the bonds and whatever else it was that we held in our investment portfolio before we made the acquisition.

In this case, what happens with Company A? In Table 1, I've shown the numbers preacquisition and postacquisition. The GAAP equity stays the same. That's because, in P-GAAP, if you paid \$500 in cash for an acquisition target, that acquisition target comes into your balance sheet at a value of \$500. You've lost \$500 of cash, you have \$500 of an asset, and the target company's asset value is \$500. So there's no change in GAAP equity. We didn't issue any shares to do this acquisition, so our number of shares outstanding is the same. Our net income went up from \$375 to \$390, so that had a corresponding impact on earnings per share. If we hit both of those numbers with a 15.4 P/E ratio, assuming that is constant, we get a \$60.06 share price. We've created \$231 of value which is derived by simply taking the difference in the share prices and multiplying by 100. So we made an acquisition. We told the analysts what's going to happen to our income, or we sort of signaled to them in some way. They've factored that into their projection models. They've said, "We still like this company, and we still like the management. We think we're going to give it a 15.4 return on equity going forward." The net result is that you've increased value by \$231, which is not bad.

TABLE 1  
SCENARIO 1: PURCHASE WITH AVAILABLE CASH

	Pre	Post
GAAP Equity	2,500	2,500
Number of shares	100	100
GAAP net income	375	390
EPS	3.75	3.90
Share price	57.75	60.06
Value created		231

**Mr. Goodfriend:** The SEC frowns on the company discussing an acquisition with outsiders before the fact. As an insider, you are limited to what you can say and do. A wise company, through its investment bankers and through its own organization, will give theoretical questions to a group of sophisticated institutional investors. They won't give the name of a company, but they'll ask, "What would you think of an acquisition that could have the following characteristics to it?" They will enumerate everything except the name of the company. It would be, we hope, accretive to earnings by 1%, 2%, and 3%, and not diluted. We can't tell you the name of the company, and we don't even know if it's going to go through. What would you think about that? Either no one would care or it would be considered constructive. They might say that they would have to see the numbers before they give their stamp of approval. They might be markedly pessimistic about it and wonder why you would want to use money for this purpose. While the company

reserves the right to do as it sees fit, because it is in charge of its own destiny, it will be guided by the pros and cons that emerge from these conversations, however theoretical they may be. The same kinds of dialogue occur with the rating agencies. The rating agencies are considered more of insiders and are precluded from using such information to the benefit of themselves or of the outside world.

**Mr. Carroll:** If the feedback is sufficiently negative, they can actually sink the whole deal.

**Mr. Goodfriend:** Yes. Or they can cause marked change in the terms or delays, at the minimum.

**Mr. Carroll:** In any event, the information coming through is communicated, or developed between the analyst community and the company. Obviously, the analyst community is independent, so they don't necessarily take what the company is saying on faith, but again, if the strategic rationale is compelling, this could easily be the result.

So what happens if we buy the company with stock? Many transactions these days are made with stock. Warren Buffet's transaction earlier this week in which he bought Gen Re for more than \$20 billion is a stock transaction. He only has to issue two new shares of stock for that. Warren likes a high stock price. Nonetheless, he's issuing new stock.

How do the mathematics of stock issuance affect the same facts? We are trying to develop what the earnings are going to be after the acquisition? In this case, we just add the two companies together because no cash is going out of the system. We are issuing pieces of paper to the seller that say he owns some stock in our company. We're not affecting the operations of our company at all, and we're not getting rid of any invested assets. So we have \$415 in earnings, which is just the \$40 plus the \$375. The purchase price is \$500, so how many shares of stock do we have to issue to get a value of \$500? We have to issue 8.66 shares. So we issue 8.66 shares with a market value of \$57.75. The seller gets the same value as he did before, except now it's in shares of Company A stock as opposed to cash.

**From the Floor:** Are those new shares?

**Mr. Carroll:** Yes, these are new shares.

**From the Floor:** So the ratio goes down now?



**Mr. Carroll:** We'll see what happens. That's part of the point of the example (Table 2). The share price is \$58.82. For example, GAAP equity has now increased because we got this asset. Company B is worth \$500, because that's what we paid for it. We didn't get rid of any other assets, because we issued more stock. So we now have an increase of \$500 in our GAAP equity. We also have an increase in the number of shares outstanding, by the 8.66. Our GAAP net income is \$415. When you divide, you see that the earnings per share has gone up from \$3.75 to \$3.82. The share price has gone up and the value created is \$116. The \$116 is not an obvious calculation. There are two pieces to it. One is, for the existing 100 shares that I already had outstanding, we take \$58.82 minus \$57.75 times 100, which is about \$107. So I created that value for my existing shareholders. I also have a value pickup on the 8.66 shares that I issued because I issued those at \$57.75, but I've been able to ratchet my income up, and those 8.66 shares are now worth more than \$500. They're worth \$9 more. There are two elements of that \$116. It's 100 times \$58.82 minus \$57.75, plus 8.66 times \$58.82 minus \$500, which is a positive number. I haven't quite created as much value as I did in the last scenario, but I did create value basically because my P/E ratio is better. My 15.4 P/E ratio is higher than the P/E ratio on the acquisition. The P/E on the acquisition is \$500 over 40, which is less than 15.4. So, I've created value because I haven't paid as much, in terms of a P/E, to make the acquisition as the market gives me for my stock.

TABLE 2  
SCENARIO 2: PURCHASE WITH STOCK

	Pre	Post
GAAP Equity	2,500	3,000
Number of shares	100.0	108.7
GAAP net income	375	415
EPS	3.75	3.82
Share price	58.82	60.06
Value created		116

**From the Floor:** Is it just the way the numbers work out?

**Mr. Carroll:** When I bought the company for cash, it was a question of giving up a 5% return and getting an 8% return. It is 500 over 40, which is 12.5. So I've paid 12.5 times earnings. I've paid 12.5 times earnings, and the market is giving me 15.4. So the difference between 8% and 5% is 3%. The difference between 15.4 and 12.5 is 3. I guess it is just the way the numbers work out.

It's clear that a yield on assets placed in the market in treasuries or the like is 5% or 6% pretax or after-tax. It's going to be markedly lower than the imputed return from the acquired company. If you're not overpaying for it in terms of numbers of shares issued, and if you're not paying up too much of a premium, then even adding back

in the newly issued shares, means the difference in those imputed yields would accrete to the surviving company. In this case, it's not a lot, but it is a plus. The rhetorical question that would be asked by the outside community is, there must be something more to this deal than just a few pennies a share that made you do the deal. Is there a strategic reason for doing it?

**Mr. Goodfriend:** There has to be another incentive to do so.

**From the Floor:** So is it more or less immaterial? I'm sure it works up to a grander level of whether you decide to use cash or stocks for.

**Mr. Carroll:** Issuing new stock is a way of raising capital. Is that a better way to raise capital or should you use some other form? Obviously, it is not easy for Warren Buffett to come up with \$22 billion out of your pocket. Issuing stock in a large deal often happens. If you could do it with cash, though, you might actually get a better pickup.

**Mr. Goodfriend:** In Mr. Buffett's case, it may signal another dimension beyond just two wonderful companies getting together. Does this suggest strongly that the surviving company is not only going to be a much larger company, but that it will also have a lot more shares outstanding, and hence much more available to the public? Is that a whole new Buffett that we're going to see? I don't know the answer to the question, but given his record, it deserves an answer.

**Mr. Carroll:** We're going to see a little bit more of the dynamics as we go forward. In scenario 3, we borrow the purchase price and pay 8% on the debt incurred (Table 3). There is the net income of Company A alone, plus the \$40 of Company B's projected P-GAAP income. The loan is for 500. You borrow all the purchase price, and pay 8% on the \$500 which is \$40, but you get a tax benefit of 35% on the \$40 of interest. Our net income, including the purchase is \$389. It's less by a dollar than our previous example of buying in cash. Therefore, the value created is just slightly less, in this case. It's just a function of the 8% versus the 5% after-tax.

TABLE 3  
SCENARIO 3: BORROW PURCHASE PRICE

Assumption: Interest rate on debt	8.0%
Net income excluding purchased entity	375
Plus P-GAAP income for Company B	40
Less Interest on loan	(40)
Plus tax credit on interest	14
Equals net income including purchase	389

**Mr. Goodfriend:** Now you have debt on your balance sheet because you have a loan due. What will the rating agencies think of it? What will your other lenders think of it? What is the pecking order of claims on assets?

**Mr. Carroll:** Are you overleveraged?

**Mr. Goodfriend:** What form of debt is it?

**Mr. Carroll:** Theory would tell you that the P/E ratio on this company should go down. Because it's more highly leveraged, it should have a higher beta, and therefore that shouldn't factor into a higher risk factor. That should factor into a lower P/E ratio. We had scenario one and three which is very similar, and scenario two did not quite give us the value creation opportunity that one and three did.

What would happen if instead of having an 8% after-tax return on equity after the purchase, we could get a 10% return? What if we could boost that income up by 2%? We'd have a pretty substantial impact on value pickup, which is why P-GAAP is such an important exercise. Companies strive, when they do P-GAAP, to make choices that will provide a cogent but positive impact, particularly in the early years, after the deal is made. Making decisions about how quickly goodwill is to be amortized, and what assets values you put on your balance sheet, or should you do anything with reserves? Those decisions can have a very substantial impact on value creation. An 8–10% pickup in ROE is not that huge a difference, yet the value creation is substantially different.

What if I pay 100 more? Say I pay \$600 instead of \$500, and I keep the earnings the same. Company B's P-GAAP earnings are still \$40. The return on equity is less. I was in competition for B, and I had to offer \$600, otherwise the deal was going to get away from me. I still get a nice pickup under scenarios one and three, but now, under scenario two, I get almost none, and the effect is nil. The reason is, I am paying \$600 over \$40. I am almost paying the same P/E ratio to buy Company B as the market gives me. I don't get any positive impact. It's sort of neutral.

What if Company A's P/E ratio is 8 instead of 15.4? The market might look at Company A and think it is a lousy company. It might give it a P/E of only 8. You actually get a pickup under scenarios one and three, but you destroy value under scenario two. Again, it's a 12.5 P/E ratio for the target, into a P/E ratio of 8 for the acquirer. You actually destroy value. What this means is that if you're an acquirer and you have one of these low P/E ratios, you'll have a big problem making acquisitions. Similarly, if you have a P/E ratio of 20 versus 15.4, particularly under scenario two, there will be a huge difference between this and the base case. So the higher my P/E ratio is, the more it makes sense for me to do acquisitions with

stock. That is because my currency is so highly valued. This probably factors very much into Mr. Buffett's calculations, when he's looking at Gen Re. Warren Buffett has a very high P/E ratio on his stock, and he's viewed positively. That gives him a distinct advantage, and it gives him an advantage when he's making acquisitions with stock.

**From the Floor:** If the acquisition is large enough, the new company wouldn't drag the P/E ratio down at all. Is that possible?

**Mr. Carroll:** What did you pay for the company? Let's go back to the equation that relates your P/E ratio to your ROE. If you buy a huge book of business, or a huge company that's going to drag your return on equity down, eventually your P/E ratio will go down to that level. What you're hoping, and what the market is counting on, is that you will bring that acquisition's ROE up to your level, and yours won't sink. That's a key point of this.

**From the Floor:** So it's a function of who's the acquirer and who's the seller.

**Mr. Carroll:** Right. When you're buying with stock, under this scenario, and if you buy a company for a lower P/E ratio than your stock gets, you're going to create value. That doesn't work forever. If you keep doing that, and you buy these companies and their ROE stays the same, you're going into the sinkhole. Most companies that are successful acquirers have been able to show that they can merge these entities, and make the resulting entity look more like themselves than like a combination of what was there before. That is what successful acquirers do.

**From the Floor:** That kind of track record is another factor in all of this.

**Mr. Carroll:** There's a self-fulfilling prophecy here. The more you do acquisitions and succeed, the more the market rewards you with a high P/E ratio which makes you able to go out and make more acquisitions.

**Mr. Goodfriend:** It's hard to quantify why a P/E ratio should be higher than somebody else's. The amount of the earnings that you gain each year is not the only factor. It's the quality of those earnings as well, and the dependability with which you can anticipate what will occur without resorting to accounting legerdemain or Mickey Mouse and Donald Duck stuff. It is just pure accretion to earnings year in, year out. In the insurance business, that is very difficult to do.

**Mr. Carroll:** Let's summarize. A high P/E ratio gives you a weapon in the acquisition marketplace. Small changes in P-GAAP earnings can translate into large

value creation opportunities, which is why P-GAAP earnings is such a critical element of the deal analysis.

Let's move to Table 4. I probably should have used different companies like Wellpoint or CIGNA. These companies are more in the life insurance field, although Jefferson-Pilot still has a group health operation that's not central to its business. If you took the active acquirers in the health care field, you would find that they would tend to have high P/E ratios. A high P/E ratio is a weapon in the marketplace for making acquisitions.

TABLE 4  
ACTIVE ACQUIRERS

	Price/Earnings	Market Cap. (\$ billions)
AG	16.4x	\$16.0
GE	32.5	275.0
CONSECO	16.7	11.0
Jefferson-Pilot	18.2	6.0
Lincoln	17.4	9.0

If we were to look at more data where I computed the actual ROE and the implied ROE. These formulas don't work perfectly. We have Jefferson Pilot and Lincoln, which have very similar returns. The implication would be that their P/E ratio ought to be about the same, and the market gives Lincoln a decided advantage in their P/E of 17.4 versus Jefferson-Pilot's 18.2. That relates to the qualitative aspects that Herb was mentioning.

**From the Floor:** Is this just the insurance arms of these companies?

**Mr. Carroll:** This is the whole company. This would reflect all of G.E.

**Mr. Goodfriend:** About a third of the G.E. earnings is financial services. The fastest growing segment of G.E. is the financial services, and a substantial part of it is annuities and long-term-care insurance.

**Mr. Carroll:** Yes.

**Mr. Goodfriend:** Many people who own G.E. don't know that it's an insurance company, and they don't want to know.

**Mr. Carroll:** They think it's making air conditioners, and they think that's why, to some degree, it's getting that P/E ratio of 34.

**From the Floor:** They also own NBC.

**Mr. Goodfriend:** A substantial part of their earnings is international which creates other variables like sensitivity to currency and hedging and expropriation and a whole roster of other things.

Let's move on to the case study portion of the session. We will look at the form of the transaction and the financing. You're going to report to us subsequently on the rationale that you used to get to a certain price, form, and structure. Each group should appoint one spokesperson.

Let's discuss Health Source. There is nothing profound about this company, but it was one of a number of successful companies during a period when "the migration" was going on. I always thought migration related to animals, but in this case, migration in the health field, as you probably well know, relates to the movement from certain group indemnity contracts to the HMO, PPO, or related alternative forms of medical coverage. This company provided such networks in New England, but also in other key parts of the Midwest and Southeast. They used third-party administrators as their medium of administration and control, and it proved to be quite successful up until 1995–96. The capitalization is a reasonable size, but certainly smaller compared to that of CIGNA at \$63 million. There were 10,000 stockholders, but a substantial number of those shares were held by the management and family.

Market cap was a little more than \$800 million at the time of the announcement. As characteristic with many insurance companies, whether it be health or conventional insurance, institutions own much of the stock. That's important for you to recognize no matter what kind of company you're analyzing. John and Mrs. Doe don't really evidence keen interest in the insurance arena until or after a deal has been announced. Institutions are the people who really drive the engine of ownership for insurance companies. General Re, is probably 90% or more. The Mellons own about 5%, and a few other controlling families own 3–5% as well. The public is not really involved in most insurance companies, and that's true in this case as well. There is a fair amount of leverage on the balance sheet (\$282 million). It is not onerous, but nonetheless, for a company in this business, as you will see, it is certainly an important consideration.

They had an HMO enrollment of 1.1 million members, weighted heavily to the New England region of six or seven states, and they had bought the Provident Life book of business, which was indemnity. They hadn't converted it yet, but they were hoping to drive much of it into the more conventional HMO. They had one of

the larger books of dental enrollments. There weren't too many successful companies in the dental area at that juncture.

As I mentioned, they were successful at the outset. The company was formed about 10 years ago. There were nominal earnings in the first year, but nonetheless a very creditable achievement. The progression of earnings continued and had a very nice bulge in 1992–93, and virtually double earnings in 1993 and 1994 when they had critical mass, were buying books of business, and enrollment accelerated. They were really hitting their stride at that juncture.

A couple of things happened, though, in 1994 and 1995 when earnings were flat. We began to see smaller margins. Of course, margins were what attracted people who got into the business, and also those who weren't in it, but were in other sectors of the health field who thought they should be. Margins went from a husky 23% after-tax to almost half of that, in relatively short order. Analysts, management, and everybody involved projected very good returns and a very good environment in 1996. It was not as fast as the pace of gain in the earlier years but certainly one with a creditable achievement when it hit 90 cents. I saw one estimate that said it hit \$1. As you will see, the company came in with a loss in 1996.

What happened during that time? Well, as is characteristic of American economies, capital was attracted to those areas with the highest margins. A number of companies entered the fray, and saw these 23%, 18%, or 17% margins that were in contrast to the business they were in, and decided they would get into it. In addition, you have Clintonian economics out of Washington, forcing the pressure on what physicians and other providers should charge. There were more second and third opinions, being subject to question. Consumerism was much more rampant. There was widening pressure on what consumers wanted versus what a company could charge for those services. The gap started to be squeezed. As a result, margins went from very husky numbers to more conventional numbers. Medical inflation, as you may recall, had been 15% or 12%. It had started to decline to 7% or 8% and stabilized between 1990 and 1994. Unfortunately, it has started to rise again, and is up between 7–9%, and one estimate was up to 10–12% for each of the next two years. The period of declining inflation or severity was over, and the period of cost squeeze was very much in evidence.

CIGNA's name is a combination of Connecticut General and Insurance Company of North America (INA). Of course, Connecticut General and INA were significant factors in their own right, in their early years. Connecticut General was one of the great life insurers for individual, vanilla life, and group insurance, and it wrote reinsurance as well. INA, one of the founders of the insurance business in these United States, was one of the most aggressive in terms of innovation and big

capitalization. It threw its weight around in the homeowner's and auto field, but also in packages and in workers' compensation. It was supposed to be the perfect marriage. They pruned some businesses off. CIGNA began to show erratic earnings. Property/casualty suffered from the softness of the cycle, and Connecticut General's position started to wither on the vine; however, its employee benefits business and its group businesses remained relatively husky.

A new management came in, which was much more business school trained, and decided they would focus on ROE, and what the investors wanted. Until that time, Connecticut General had construed itself to be kind of holier-than-thou, remote from and not really sensitive to investor needs. While they were based in Hartford, that's where the similarity ended. They weren't sensitive, as were Travelers and Aetna, to the vagaries of the investment community, to the same degree. They started to prune off their businesses. At the beginning of the early 1990s and the mid-1990s, they decided they wanted to be out of the life insurance business, in good measure, except for the employee benefits retirement savings kinds of policies, and be involved in property/casualty insurance. In order to be importantly involved in property/casualty, with 30–35 cents of virtually every contract medically intensive in the businesses they were involved in, whether it be workers compensation or the like, they felt they should be in the complete integrated managed care, A to Z syndrome. But they weren't in it, and they still had some group business left. They decided, therefore, to concentrate on those two businesses and see what they could do to expand, either de novo, organic growth, or by acquisition. Earlier in 1998, it sold off the remaining part of the individual life business to Lincoln National. So here you have a company that was a giant in life insurance and in property/casualty, honing down, as many companies did, and trying to focus more to maximize returns and minimize volatility and cyclicity.

You're trying to place yourself in the position of managements of both companies at that point in time. You had inflation at 7–8% down from, as I mentioned before, double-digit inflation, but it was no longer declining. You had resurgent wage inflation, competitive pressures that were very keen, and the migration was continuing at an even faster pace, but it was very regional in scope. It was one thing to be in Indiana, but quite another to be in New York, Minnesota, or California. There were pockets of high-concentration migration, and pockets where nobody cared. The technology costs were on the rise, and the indemnity costs were rising from 9–11% to a factor above that. Price increases were lagging due to those aforementioned consumer pressures.

Let's put these two companies in juxtaposition statistically. Both Charles and Bill pointed out, the book value is less germane with a health insurance company than it is with some other facet of the insurance endeavor. Nonetheless, it is one



consideration, if only to show what the disparities are. At the end of 1995, Health Source had a book value of \$7.68 a share, but as I mentioned before, something went bump in the night, and margins went to oblivion and the cost pressures accelerated. Not only did they not gain earnings, but as Charles pointed out in his table, they lost money. That hit book value substantially. The nominal book value was only \$7.50 and it got hurt by almost 15% and earnings disappeared. You had an academic P/E ratio that was not meaningful, to use a euphemism. The company's stock was selling at about \$15, down from \$40. It had no place to go. And so, the only reason that the price-to-book value still looks husky is because the prices here and the book value are still about \$6 a share. That contrasts with \$40 a year earlier, 14% ROE, virtually double the price-to-book ratio, and a P/E ratio that was often in cloud 37 someplace.

It was not unusual, at that juncture, for HMOs and hospital management companies to sell at a 25–50 P/E ratio, depending upon which ones they were. Their greater progression in earnings was exceeding 20% compounded, and they were off to the races. CIGNA, on the other hand, was much more conventionally priced, although it was improving because it had decided to focus its business. While the book value didn't show it, because it was in this transitional phase, it was stabilized at about \$82. Part of what happens to the earnings per share includes some nonrecurring earnings gains and reserve releases, but nonetheless, the bulk of the improvement came from the operating improvement. One of the interesting anomalies is the P/E ratio was much higher in 1995 because the earnings were so nominal, but 10 times earnings didn't seem like it was a big number, but vis-à-vis the other insurance stocks, it was climbing. The price-to-book, on the other hand, did start to show a meaningful improvement.

The ROE, the most significant statistic on the side of the ledger, showed the most significant improvement up to this moment, and still shows very good returns. So you had a share price that reflected it, at least in price. It was up \$30 on \$90, in the course of a year, in a relatively soft market for property/casualty companies. As you may know, we are in the 9th or 10th consecutive year of soft pricing for commercial, and to some extent, personal lines, with attendant erosion of margins during this period of time. Its earnings and its per-share price reflected the changing environment for CIGNA.

Let's go over the structure of the Health Source membership at the time of the deal. There were somewhat less than one million fully insured HMO enrollees, and 45,000 indemnity, which is markedly less than was the case previously. There was still a high number of third party administrator-related entities. There were 101,000 self-insureds and a nominal amount of others, whoever the others are. But the total

was a formidable 3,105,000 customers, in one form or another. It was nothing to sneeze at, but it was concentrated in a handful of regional areas around the country.

**Mr. Horbatt:** Now we will break the audience up into groups.

**Mr. Goodfriend:** Remember to refer to your material that gives information on where going concerns were for insurance and related health equities, but also where deals were taking place. You will have the premium over book and the P/E ratio. It also reflects what capital was available during that era. So you have the flexibility of knowing whether you're cash rich or poor, and you could have access to the capital markets.

**Mr. Carroll:** We don't want you to try to duplicate the actual situation. Your objective is to negotiate and come up with a deal. If you're at Health Source, things are not looking too rosy. If you're at CIGNA, you're trying to acquire more market share. You both have a reason to cut a deal. The right price is the issue.

**Mr. Goodfriend:** If one or more of you was at CIGNA at the time, or Health Source, please try to restrain yourself, because you know what happened. Try to be objective. That's probably impossible to do, but try to do it anyway.

[Audience breaks for case study work and then each group reports results.]

**From the Floor:** Our rationale was very simple.

**Mr. Horbatt:** What was the deal?

**From the Floor:** It was \$22.50 a share, or about \$1.7 billion.

**Mr. Goodfriend:** About 1.7 billion, and in what form?

**From the Floor:** Cash, and I'm still employed.

**Mr. Goodfriend:** That's less 50 cents a share for finder's fees for the three of us, right?

**From the Floor:** Sure, if you want to see it that way. We did most of our negotiating with our first group, and we tried to get a ballpark estimate of what we thought the value was going to be. We were very far apart to start with. But we started considering the added value of the company, and the bad year in 1996. We thought the base price would have to be somewhere around where it was trading currently, which is about \$900 million. They were looking for something much,

much higher. We got into a stalemate with our first group, because we couldn't settle on a price. But that brought us close to where we finally settled, and we actually had an offer that was a little bit higher than the price we actually sold it for. When we changed tables, we knew where we thought the value would be, roughly, and we settled on \$22.50 a share, as a reasonable place. We looked at it on a basis of what we knew medical companies were selling for. It was \$1,000 per HMO member. We were debating what to do with the indemnity members. Should it be \$100? Should you convert some of the \$100 of indemnity over to the HMO? How much value should you give? So we went through a lot of that mental gyration in terms of trying to come up with a fair price, and that's where we settled.

**Mr. Horbatt:** What about the other side?

**From the Floor:** We basically adjusted our earnings per share in 1996 by taking out that \$35 million special charge. That gave us an earnings-per-share of about 50 cents, and a share price of about \$22.50, which is where we started. We tested the waters with the price a little bit above that and found a lot of resistance to that. The other thing we attempted to do was to tell the buyer what we had to bring to the table, as far as what they were getting for their money. We were offering them a presence in the markets that they were not in and a retention strategy for some of their large multistate employers because we had agreements with one-hospital towns where CIGNA is basically an unknown. So we already had a foothold in places where they didn't.

We had a very large membership base (two million members in our indemnity business), which we had planned to transfer to managed care, which is the wave of the future these days. We said the reason why we're selling is we didn't have the infrastructure and the administrative capacity anymore to deal with the growth that we had acquired over the last few years, and we're looking for somebody to take care of our business. It seemed to work with these guys.

**From the Floor:** We were also influenced by what the sale price actually was.

**Mr. Horbatt:** Next time we're not going to tell you that. The next group should present their deal. What was your price?

**From the Floor:** It was \$21 a share, and it was a stock deal. There was one extra thing. We gave an extra \$4 million for the CEO, and an extra \$1 million for the next four highest officers, which takes care of all of us a little bit.

**Mr. Goodfriend:** This is in addition to the \$21?

**From the Floor:** Yes. That made it worth it for us.

**Mr. Goodfriend:** I'm sure your institutional shareholders are very happy with that.

**From the Floor:** We made it a stock deal, so we just had the CIGNA stock, instead of cash, for tax purposes. We all have a substantial stake, so we didn't want to have to pay taxes on all that cash.

**Mr. Horbatt:** Okay. What was the other side of the deal?

**From the Floor:** We're just trying to come to the fair price, looking at the anticipated earnings, and hoping the earnings at least get back to the 1995 levels. We are adding in the book value and hoping there's additional savings on infrastructure and bargaining power with the physicians. Getting to \$21 was a bit of a stretch.

**Mr. Goodfriend:** And in doing so you opted to pay with stock.

**From the Floor:** Right.

**Mr. Goodfriend:** I'm wondering whether it was accreted to CIGNA's earnings if you paid with stock. Was the P/E ratio at 10 times earnings?

**From the Floor:** We talked to the analysts, and they said that the P/E ratio would go up.

**Mr. Carroll:** The truth is that it did go up. CIGNA's P/E ratio and earnings are now better.

**Mr. Goodfriend:** Their book value is better, too.

**Mr. Carroll:** Yes.

**From the Floor:** Our deal is for \$1.3 billion. It's about \$20.63 per share.

**Mr. Goodfriend:** Cash or stock?

**From the Floor:** Cash. Our original offer was \$1.2 billion, but they're asking \$1.5, so we struck a deal. Both sides made some sort of a compromise because we're both in a hurry to go to the beach. So our rationale behind our \$1.2 billion original offer price was that this company's earnings-per-share during the three years from 1993 to 1995 is in the ballpark of 90 cents per share. But in 1996, even adjusting

with the \$35 million nonrecurring acquisition loss through the Provident, it's still 40 or 50 cents earnings per share. It looks like this industry or this company is moving into some sort of down cycle. In the health industry, once you get into the down cycle, it usually takes two to three years to fix your pricing through the new contracting strategy or increase your premium and cut your operation costs. One-third of the three million members are HMO fully insured members. It usually takes at least one year to deal with the insurance department to try to increase your rate. It will probably take another two to three years to turn around the company, which would be 1998 or 1999. A reasonable target profit for a fully insured HMO is about 2% or 3%. We don't see that there has been that kind of a profit for the past few years. You're talking about \$3 to \$4 range here, PMPM. For a one million member company, you're talking about target profits between \$35 million to \$40 million annual premium.

The balance of the business is indemnity and a supplemental, like a dental business. For much of the ASO business, your target profit is in the 0.5–1% range. That probably accounts for another \$20–25 million. If we talk about this company, we're talking about a reasonable target profit of about \$60 million. Using a P/E ratio of 20, that's \$1.2 billion because we don't have time to do a comprehensive, actuarial, or discounted cash flow. We just say it is \$1.2 billion. We take \$1.2 billion and divide by the current three million membership, which is about \$400 per member. That is in comparison to the deal last year in which Humana paid \$1,000 for Choice Care. Choice Care had a 10-year solid growth in the membership earnings and 100% of the book business was fully insured. We think \$400 per member is a reasonable benchmark.

**Mr. Horbatt:** Very good. On the other side of the deal?

**From the Floor:** We had a claim that we turned down a \$23.50 offer.

**Mr. Horbatt:** Don't you feel smarter now?

**From the Floor:** Well, it was a learning process.

**Mr. Goodfriend:** Was that cash or stock?

**From the Floor:** It was cash. We might have been able to sneak that one up even higher if we would have worked a little longer. Our main focus was on the acquisition in our negotiating. We ignored what the actual earnings were and what the share price was currently. We were trying to emphasize the 5.6 million members that we were bringing to the table. That would be a combination of the HMO, indemnity, and dental products. So we attacked it more from the viewpoint

of, what it would cost to add those new members into your network. You'd get automatic growth, if you wanted to call it that, just so the members themselves had intrinsic value, ignoring what the earnings level currently was. Most of our negotiating and rate price setting was revolving around member costs and not the actual earnings levels.