INVESTOR'S VALUATION OF AN INSURANCE COMPANY

ABSTRACT

The paper discusses the items an investor should consider to determine the purchase value of a property-casualty insurance company. These items include both strategic considerations and financial measurements.

The strategic discussion makes distinctions among defensive, offensive, and diversification strategies. Also, the paper makes the point that property-casualty insurance companies are heterogeneous, and so the acquisition Target's strengths should match the strategic requirements or operational weaknesses in the investor (or Buyer). The ROI requirement that the investor should demand from the acquired insurance company depends, in part, on whether the acquisition strategy is defensive, offensive, or a diversification.

The financial discussion values an insurance company based on total returns. An example is given. Comparisons are made to the Sturgis paper in PCAS 1981, as well as to the common practices of consulting actuaries. The point of view in the paper is that investors should measure value in terms of maximum stockholder dividends. Actuarial studies are criticized that ignore the effects of taxation and the costs of maintaining surplus at required levels.

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INVESTOR'S VALUATION OF AN INSURANCE COMPANY

INTRODUCTION

There are important differences between the way an actuary values an insurance company and the way a potential investor values the same insurance company. When we say "values" in this context, we are referring to placing a financial worth on the insurance company for purposes of acquisition. Also, while analogies can be drawn to all types of insurance companies, the examples used here refer to property-casualty insurance companies.

The differences in perspective of the actuary and the investor stem primarily from the fact that the investor has to consider the acquisition in conjunction with his other businesses. The actuary, on the other hand, who is performing a financial valuation of an acquisition target focuses only on the insurance company to be acquired. In fact, the valuation actuary should obtain the same range of values whether or not his study is done for the buyer or seller.

It is not the intent of this paper to repeat the ingredients and the manner of completing a good actuarial valuation report. (For this, refer to "Actuarial Valuation of Property/Casualty Insurance Companies", Sturgis, PCAS 1981.) Rather, the intent is to describe how an investor should value a potential acquisition, and how in so doing the investor should utilize the results of the actuarial valuation report. As a point of departure, we assume that a good actuarial valuation study has been completed which contains at least the following elements:

- A background description of the acquisition target in terms of its strengths and weaknesses compared to the insurance industry as a whole.

- Adjustment of the Balance Sheet to reflect the adequacy of loss and loss adjustment expense reserves, the re-statement of bonds to market value, and the adjustment to market value of any other assets (e.g., real estate, agents balances, etc.) where the market and statement values vary significantly.

- The present value of earnings that are expected to be earned in the future usually broken down into several components:

1. Investment income from the runoff of loss and loss expense reserves.
2. Underwriting and investment income from the runoff of the exposures in the unearned premium reserve.
3. Underwriting and investment income from the projected renewals of in-force policies.
4. Underwriting and investment income from the potential new policies generated by ongoing marketing efforts.

Sometimes, items (1) and (2) are combined; sometimes items (3) and (4) are combined; and sometimes item (4) is omitted. Also, it is usual practice in actuarial reports to present a range of values for each earnings component using alternative discount rates.

While this input is crucial for the investor (and woe usually befalls the investor who doesn't get this type of actuarial input), the investor also has to consider two other important issues. First, how does this acquisition fit strategically into the business plans of the acquirer? And second, how is the acquisition going to be financed? Both of these broad questions involve a host of other considerations which are discussed throughout this paper.

The investor's answer to the strategic question should resolve whether the acquisition fixes a weakness in the investor's existing businesses; whether the acquisition is synergistic with the existing businesses; or whether the acquisition is a diversification. A critical evaluation of these possibilities should provide insight into what is expected to be accomplished in terms of the chosen market strategy by making the potential acquisition. This, in turn, should lead the investor to make a careful "make versus buy" comparison in terms of cost, timing, and risk. Thus, the price that an investor would be willing to pay could be affected. These strategic considerations are discussed in the next section.

Also, the financing question for the investor goes beyond the actuarial study to consider total returns on the investment in comparison to other potential investments, including impacts of debt and taxation. The investor's attitudes for growth and risk, as well as the investor's access and needs for capital need to be considered to arrive at a final price the investor might pay. These financing issues are discussed in the final major section.

THE STRATEGIC QUESTION

How does the potential acquisition of this insurance company (the "Target") fit into the other businesses of the investor (or "Buyer")? This question is often ignored, or examined only in a cursory manner. Yet, the advisability of the acquisition probably depends more on this central strategic question than on whether the purchase price is attractive.

There are many good texts on strategic planning, and so in this section we start with the presumption that it already has been established for good reasons that the particular property-casualty strategy selected by the investor makes sense. Then, the issue becomes whether the potential acquisition solves the requirements of the chosen strategy, and how the purchase price could be considered by the investor to reflect this.

The potential property-casualty insurance company acquisition should be analyzed in two regards:

1. What type of property-casualty company is the Target, and does this type meet the investor's strategic requirements?

2. For the type of company that the Target is, does it compare favorably or unfavorably with its competitors and, more importantly, with the Buyer's existing capabilities?

The answer to question #1, above, determines whether the acquisition should proceed at all. The answer to question #2 affects the purchase price that the Buyer might be willing to pay.

Also, it is useful to classify acquisitions according to whether they fix a weakness in the Buyer, provide marketing synergy with the Buyer, or are a completely new business for the Buyer. Respectively, these categories of potential acquisitions are: defensive (fix a weakness), offensive (synergy), or diversification (new business).

A Buyer can rationally pay a higher price relative to value inherent in the Target if the Target's strengths fix a recognized weakness in the Buyer. On the other hand, a pure diversification should generate a higher ROI for the Buyer. Finally, in the case where the synergies between Buyer and Target are not clear and where overlapping strengths exist, the acquisition must be carefully assessed in terms of functional cost savings and any other synergies versus sales leakage caused by marketing overlap. This is discussed further below.

An example demonstrates that it is not enough to acquire a good insurance company, but rather the type of insurance company to be acquired is crucial to the successful implementation of the investor's strategy.

Fireman's Fund may be an example of an excellent company having been acquired by another excellent company, but an acquisition that perhaps shouldn't have been made or, at least, was made for the wrong reasons. In 1968 American Express acquired Fireman's Fund, and in 1985 Fireman's Fund was spun off by AMEX. (The author does not have inside knowledge about either of these transactions, and so possibly the following independent observations would be refuted by AMEX.) The fact that Fireman's Fund's results were unsatisfactory to AMEX and that Fireman's Fund has been spun off is evidence that the acquisition didn't fit as well as probably was hoped.

We can read into the events at AMEX and speculate that AMEX primarily wanted an insurance company to market insurance products to its credit card holders. AMEX still has retained specialized insurance operations for this type of marketing. The problem with the Fireman's Fund acquisition in 1968 was that it was the wrong type of insurance company for AMEX. Fireman's Fund's excellent reputation came from its independent agency operations and its capabilities in commercial lines. Fireman's Fund did not have the type of direct response marketing functional capabilities that AMEX needed to sell to its credit card holders.

The property-casualty marketplace and the companies that serve it are not homogeneous. A Buyer should analyze a potential acquisition and its fit with the Buyer's selected strategy in terms of:

1. Distribution system
2. Product capabilities
3. Geographic specialization

Distribution* is perhaps the most important area where good strategic fit must exist. The major concerns are whether the Buyer's existing distribution system and the Target's distribution system will be in conflict, and whether the products to be sold by the Buyer's existing organization through the Target's distribution system (or vice versa) are appropriate.

The potential for conflict between distribution systems arises, especially, because independent producers should be expected to be wary of a Buyer's motives for acquiring controlled production capabilities. Thus, a Buyer with independent producers who was acquiring, say, direct response capabilities should be clear as to whether the intent is to support the existing independent producers or to develop a completely separate distribution channel.

Another strategic fit issue regarding distribution is whether the Target's particular distributors are appropriate for marketing the Buyer's products. For example, independent brokers generally represent larger, urban commercial insureds. At the other extreme, direct response marketing generally has been more successful for small policies such as personal lines.

The product capabilities of the Target should be analyzed in terms of whether they are extensions of the Buyer or overlaps. Product extensions, while difficult to analyze since the Buyer may be unfamiliar with the additional products, represent additional revenue potential. As stated above, this assumes that the distribution system that will emerge after the acquisition will be able to handle the product extensions effectively. Product overlaps, on the other hand, generally should represent cost savings as duplication is eliminated in the emerged Buyer-Target organization. Product overlaps usually occur if the driving force for the acquisition is a geographic extension.

Geographic extensions usually are the easiest acquisitions to evaluate. The savings in overhead costs and other functional areas usually is apparent, and the opportunities to market similar products through a similar distribution force, just in another area, usually can be evaluated readily.

*The most basic distinction between types of distribution systems is independent producers versus controlled production. Independent producers can be either independent agents or brokers. Controlled production can come from employed agents, exclusive agents, or direct response sales.

On the other hand, Buyers tend to make mistakes in overestimating the value of geographic extensions in two ways. First, it is rare that a geographic extension is pure, and some distributors will find themselves representing both Target and Buyer. Therefore, the Buyer should expect some of these distributors to seek other markets as partial replacements. Second, the Buyer's marketing organization will become more complex, and so the savings from eliminating the overlap between the Buyer's and Target's functional areas should be expected to take longer and not be as complete as might be planned originally.

COMPARISON TO BUYER'S CORPORATE OBJECTIVES

As mentioned above, the highest return on investment (ROI) should be required for a DIVERSIFICATION, and an OFFENSIVE strategic objective should be required to generate a higher ROI than a DEFENSIVE objective.

A diversification strategy should be expected to achieve the highest ROI, because it would have to be compared against the universe of possible investments. Also, a diversification may be viewed as riskier by the Buyer, because he doesn't have inside knowledge about the particular business of the Target. Similarly, an offensive strategy probably should have a higher ROI requirement than a defensive strategy, because an offensive may not have to be accomplished at all. Presumably, a defensive strategy must be accomplished, and so the acquisition that fulfills a defensive objective might be viewed on a least-cost basis. The alternative to a defensive strategy is to invest internally in the Buyer's existing business to fix the known functional deficiencies.

In practice, a potential acquisition may not be completely a diversification, because some synergies may exist with a diversification although these synergies are not the primary motivation for the acquisition. Similarly, a potential acquisition may have elements of both offensive and defensive strategies.

In the cases where a strategy is offensive or a diversification the measurement of the acquisition's financial value should be in terms of ROI. The more a strategy is characteristic of a diversification then the higher should be the investor's hurdle rate (i.e., minimum expected ROI).

If the acquisition has defensive strategy characteristics then in addition to ROI the financial transaction should be measured in terms of costs savings, since the weaknesses in the Buyer have to be fixed anyway. The cost - benefits to be measured are as follows:

Benefits (Cost Savings):

1. Internal costs of Buyer to fix weaknesses in Buyer that would otherwise be fixed as a result of the acquisition.

2. Additional cost savings of eliminating areas in Target (or Buyer) that would be redundant after the acquisition.

Costs:

1. Purchase price premium over adjusted book value.

Another benefit that is often given high intangible value by Buyers is the time savings of buying versus building. However, a corresponding intangible cost that is often overlooked is the difficulties of merging an acquired employee culture into the existing Buyer's organization.

In summary, the Buyer should analyze carefully his internal requirements and the reasons for pursuing a potential acquisition. A cost - benefit study that seriously measures the options of internally building the desired capabilities should be completed. Finally, the Buyer should settle on a hurdle rate of return on investment (ROI) that reflects his alternative uses for capital, risk assessment, and strategic needs to expand his insurance business via the acquisition.

THE FINANCIAL QUESTION

Armed with insight into the strategic reasons for making the potential acquisition the question becomes, how much should the investor be willing to pay for the Target.

This author finds nothing technically wrong with the reasoning and examples in Sturgis' paper (PCAS 1981). However, in practice there are many professional consultants' actuarial reports that differ in some regards from Sturgis' suggested methods, and in the investment community there are still other alternative measurements that are utilized and that may be more practical than Sturgis' example.

Sturgis gives two formulas, taken from Bowles and Turner, for calculating values of a property-casualty company. The first formula involves the discounted value of maximum stockholder dividends. The second formula involves the current net worth plus the discounted value of future earnings less cost of capital. Sturgis goes on to give an example which demonstrates the use of the second formula, projecting after-tax earnings for 30 years.

In common consulting practice, there are several differences often found from Sturgis' method. Many consulting reports do not treat the cost of capital explicitly, as does Sturgis, and this is a serious error on the part of the consulting firms. Also, consultants' reports tends to be on a pre-tax basis, which is not wrong but incomplete. Many consultants' reports do split the projections separately for renewal versus new business, which Sturgis did not do, and this is an attempt by consultants to clarify the source of earnings and to assist in quantifying the value of "goodwill" (comparable to new business from the existing distribution system).

Sturgis as well as many consulting reports in practice show a range of values depending on the selected discount rate. Thus, the actuaries' traditional posture is that the selected discount rate is a matter for the investor to decide. Not surprisingly, the ranges of values that are shown in actuarial reports are very wide based on typical discount rates from 10% to 30%, or so.

In the investment community it is impossible to specify a single financial model as being correct. However, an investors' financial model for valuing a property-casualty insurance company should be based on the following principle:

Value is based on return on investment. Investment is the cash input by the investor, and returns are the cash outputs to the investor. Any other measurement does not seem rational for the investor, or is really just a special case of this overall principle. For example, if an investor said he was interested in growth in earnings it must be because he believes growth in earnings leads to a higher stock price which represents a higher cash value to him from the eventual sale of the stock.

In practice, the investor's time horizons when evaluating an acquisition usually are shorter than the actuaries' model, probably 5 to 10 years versus 30 years demonstrated by Sturgis. Also, the timing of the cash outflows or any additional required cash inflows is a critical determinant for the investor of the ROI as well as the riskiness of the deal. Rothman and Deutsch (PCAS 1981 discussion of Sturgis' paper) suggest that timing risk could be reflected in a model by utilizing higher discount rates for later years. Implicit in the measurement of risk as a function of the timing of the projected cash flows, with more risk associated with later cash returns, is the idea that we cannot predict well for very far into the future. Another way to reflect timing risk that investors commonly utilize is to calculate how much debt in a leveraged deal could be paid off within, say, 7 years. This is a practical way for the investor to make sure the financial benefits for the acquisition are not too far into the future.

The real element of risk in an acquisition deal is how confident the investors are that the projected results can be achieved. It follows that the investor should analyze alternative scenarios for the key assumptions. These sensitivity tests provide a range of results for the value of the company in terms of varying ROI for a given purchase price. The model also can be used to back into a purchase price that generates a stipulated ROI.

The investor's model also must show returns that are: 1) after-tax, and 2) based on statutory income results. This is because unless the investor resells the Target he only gets cash out of his investment via dividends. Typically, dividends from the Target are limited by state statutes based on statutory net income and must be approved by the Insurance Department. Typically, consulting

actuaries' reports are pre-tax, because it is difficult to consider the effects of the Buyer's tax situation on the taxes to be paid by the Target.* However, the omission of taxes in a financial valuation model begs the real question that the investor needs answered.

Another consequence of the basic investment principle is that the investor will desire to maintain a minimum statutory surplus. By doing so, the investor minimizes his cash infusions into the Target or delays them until absolutely necessary to support premium growth. Also, the investor usually will take maximum cash dividends out of the Target as soon as possible to provide flexibility for further investment decisions.

Consequently, the minimum surplus constraint usually is determined by the investor's perception of the need to maintain a certain Best's rating and of what surplus amount will satisfy Best's. While Best's rating criteria are not totally public knowledge and subject to change, at this time the practical maximum premium to surplus multiple is about 3.0. It could be less depending on mix of business, reinsurance, and other risk factors as evaluated by Best's.

In addition to the premium to surplus multiple, the investor also can increase his financial leverage and, therefore, his expected ROI by utilizing debt. Thus, even cash rich investors tend to utilize debt. Usually the amount of non-recourse debt (i.e., debt guaranteed by the creditworthiness of the Target alone) is limited to a fraction of the purchase price, but it is not impossible for an investor to borrow 100% of the purchase price (so that the theoretical result of the ROI equation could be infinite).

Since the amount of debt directly influences the ROI, in order to compare an acquisition deal against any standard or competing potential acquisition, the investor must examine a hypothetical unleveraged ROI. The unleveraged ROI should be compared to the long-term and current cyclical returns earned by the insurance industry and to the alternative returns that the investor has

*The 1986 tax bill limits the ability of a Buyer to utilize the accumulated tax loss carryforwards of the Target as an offset to the tax liabilities of the Buyer's other businesses, and so it should be more realistic than before to reflect a tax rate based solely on the results of the Target. However, this too is a gross approximation; the modeling of a more accurate tax rate is beyond the scope of this paper.

available outside the insurance industry. In addition, the investor should modify his required financial return upwards or downwards depending on the strategic necessities for acquiring the strengths of the Target (as discussed in the previous section).

CONCLUSIONS

The potential acquiror of a property-casualty insurance company should make sure that the following analyses are completed:

1. A strategic assessment of the pros and cons for making the particular acquisition should be completed. The Buyer should know whether the acquisition primarily is fixing a weakness in his existing organization, or whether the acquisition will be an extension of his existing business. If the acquisition is to be an extension, in what ways will it be synergistic with the current business? Also, of all the possible insurance companies does the particular Target have the type of distribution, product capabilities, and other strengths that match the investor's strategic requirements. Finally, does the acquisition make sense when compared to the alternatives of the Buyer internally building the strategic strengths that the Target would otherwise bring to the Buyer?

2. The Buyer should calculate a preliminary indicated price he is willing to pay for the Target. This preliminary indicated price should be based on the following:

    a. The Buyer should stipulate a minimum unlevered ROI based on the Buyer's access to and cost of capital. The capital and earnings projections for the Target should be used to back into a maximum purchase price given this minimum unlevered ROI. Also, the unlevered ROI should be compared to other alternative investments and to average long-term returns for the insurance industry.

    b. The Buyer should analyze downside sensitivity tests to potential surprises in the Target's earnings projections. These alternative earnings scenarios should be used to calculate alternative indicated purchase prices for the Target given the same unlevered ROI as selected above.

c. The Buyer should analyze a levered purchase scenario, even if the Buyer decides to utilize 100% cash or stock for the acquisition. By analyzing how much debt could be paid back within a set time frame (usually 6 to 10 years) the Buyer gets a practical measure of the capital risks involved in the proposed acquisition.

3. The Buyer should always have an actuarial analysis of a potential acquisition completed. However, the actuaries' analysis must be supplemented to include the effects of taxation and the costs of carrying surplus. This means that both new and renewal premiums from the Target's momentum operations must be included in the underwriting projections. Also, how the Target's operations will be changed by the Buyer with subsequent potential impacts on both the required surplus and taxation of the Target are necessary ingredients to the acquisition analysis.

EXAMPLE

These principles are demonstrated below using similar underwriting assumptions (reserve runoff, premiums, loss ratios, expense ratios) as used in Sturgis' example, i.e., "W.C. Protective". The input assumptions are summarized on exhibit I. Sturgis also uses a maximum premium to surplus ratio of 3.0, as we will in this example.

We will assume that the purchase price will be $18.9 million, which is the price calculated by Sturgis to achieve a 20% ROI. Also, we will assume that 90% of total assets are invested in taxable securities earning 6%, and that the tax rate is 34%. (The asset yield and tax assumptions are somewhat different than Sturgis' example, but they reflect the new tax bill and the drop in interest rates rather than different principles.)

Rather than specifying a COST OF CAPITAL (Sturgis used 5% and consulting actuaries tend, by default, to use 0%), we calculate the total return from the Target based on minimizing the use of the investor's cash. Then, the investor can decide if the ROI is sufficient to recommend the deal. We assume that 80% of the purchase price can be borrowed at a cost of 10%.

Exhibit II shows the expected results of the acquisition on an unlevered (i.e., no debt) basis. The operating income projections show a long-term combined ratio of 102.1%, although the first year's combined ratio is lower due to low initial general expenses which in the model are a function of earned premiums. In practice, the investor should investigate the general expense budgets carefully for the Target in the preceding year to verify that the projected expenses are reasonable for the early years of the model. Experienced investors admit that hoped for expense savings from cost cutting in the Target company are harder to achieve and takes longer than usually is planned. The model can be adjusted by adding amounts for start-up expenses.

While the combined ratio exceeds 100% for "W.C. Protective", net income is significant, and is enough to fund growth in the company Also, stockholder dividends are paid in every year. Stockholder dividends are determined from the amount of net income that can be taken out of the Target and still maintain the premium to surplus ratio at 3.0.

Notice that on the holding company's balance sheet there is $3.9 million in "goodwill". This is because the purchase price of $18.9 million exceeds the surplus of the Target ($15 million) by $3.9 million. The amount of goodwill must be amortized into expense by the holding company over a period of years, usually 20 years. The holding company may or may not get tax benefits from the amortization of goodwill.

At the bottom of exhibit II is shown the investor's projected cash flow. The purchase price is reflected as cash outgo, and stockholder dividends are reflected as cash income. Also, hypothetical sale prices are shown based on multiples of book value and pre-tax price to earnings. For this example, it is assumed that the sale price of the Target could be 6 x (pre-tax P/E) or the same multiple of book value for which the Target was purchased by the Buyer (1.26 = $18,900/$15,000). Even if the investor does not want to sell the Target, the hypothetical sale prices show how the investment compares to alternatives and how the Target's returns change over the time frame from 5 to 10 years.

In this example, the ROI on an unlevered basis does not vary much whether the investment is sold in year 5 or 10. A range of ROI from 13% to 15% is lower than the insurance industry has earned in the long-term. However, the ROI compares favorably with current bond market returns.

Whether the investor should proceed with this acquisition depends on how confident the investor is that "W.C. Protective" will achieve these projected growth and underwriting results, how badly the investor needs the strategic strengths offered by "W.C. Protective", and what alternatives the investor has for his capital. In this example, the investor probably would have to be fairly confident about the projected underwriting results and also would have to have a strong strategic reason for wanting a workers' compensation carrier. As a diversification the ROI probably is not high enough. Alternatively, the investor could try and negotiate a lower purchase price.

Exhibit III shows how the investment looks on a levered basis, with 80% of the purchase price covered by debt. In the first year, 1987, the operating income of $3,266 is sufficient to cover the debt cost of $1,512. This degree of debt coverage (2.16 = $3,266/ $1,512) is considered good.

Instead of stockholder dividends the increases in capital funds that are not needed to maintain the premium to surplus ratio are used to pay down debt. At the end of ten years the amount of debt is reduced from $15.1 million to $5.7 million. This amount of debt reduction is not exceptionally good; many investors look for a leveraged deal to repay all debt within 7 years or so. However, the degree of debt reduction in this example is consistent with the unlevered ROI which also is not exceptionally good.

Even though the unlevered returns are not exceptional, the levered ROI is excellent. Notice that the levered ROI drops sharply in this example the longer the investment is held. As the debt gets paid off the levered ROI will approach the unlevered ROI. (This observation is offered without proof.)

Exhibit IV summarizes the types of calculations usually presented by consulting actuaries. They tend to list the value of beginning surplus, the present values of the runoff of the loss reserves and the unearned premium reserves, and the present value of renewal policies. In this example, these amount to $24 million. The present value of new business which is sometimes presented by consulting actuaries would make the actuaries' indicated value even higher.

Obviously, this is much higher than the investor can justify by examining the total returns on investment as described above. The major deficiencies in the consulting actuaries figures is the omissions of the income taxes that will be incurred by the Target and the cost of maintaining the Target's surplus at required amounts, especially in view of planned growth.

Input Assumptions
W.C. Protective

Coverage Term:
All policies are for 1 year terms and are issued evenly throughout the year.

Reserve Runoff:
The ratios of loss and loss adjustment expense reserves to ultimate incurred at successive twelve month intervals from the beginning of the accident year are:

12 mos.	.677	60 mos.	.120
24 mos.	.382	72 mos.	.089
36 mos.	.250	84 mos.	.065
48 mos.	.167	96 mos.	.040

Written Premium:
$40 million in 1987 followed by 10% annual growth thereafter.

Unearned Premium:
Assumed to be $11 million as of the end of 1986.

Loss Reserves:
The actual loss and loss expense reserves as of 12/31/86 by accident year are assumed to be exactly adequate and are as follows:

1986	$10 million	1982	$4 million
1985	17 million	1981	3 million
1984	11 million	1980	2 million
1983	6 million		

Loss Ratios:
Assumed loss and loss expense ratios for all future years are 75%.

Acquisition Expense:
The ratio of those expenses to be related to written premium is assumed to be 8%.

General Expense:
The ratio of those expenses to be related to earned premium is assumed to be 20%.

Investment Yield:
6% taxable.

Premium to Surplus Ratio:
3.0

Tax Rate:
34%.

Initial Surplus:
$15 million.

Purchase Price:
$18.9 million.

Debt Rate:

10%.

Amount of Debt:

Exhibit II	0% of purchase price
Exhibit III	80% of purchase price

UNLEVERED PURCHASE AMTS IN $ 1000 EXHIBIT II
W.C. Protective CAS May 1987

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
PRO FORMA OPERATING INCOME PROJECTIONS											
Written Premium		40,000	44,000	48,400	53,240	58,564	64,420	70,862	77,862	85,744	94,318
Earned Premium		31,000	42,000	46,200	50,820	55,902	61,492	67,641	74,406	81,846	90,031
Incurred Losses		23,250	31,500	34,650	38,115	41,927	46,119	50,731	55,804	61,385	67,523
Selling Expense		3,200	3,520	3,872	4,259	4,685	5,154	5,669	6,236	6,859	7,545
General & Admin. Expense		6,200	8,400	9,240	10,164	11,180	12,298	13,528	14,881	16,369	18,006
U/W Profit		(1,650)	(1,420)	(1,562)	(1,718)	(1,890)	(2,079)	(2,287)	(2,516)	(2,767)	(3,044)
Invest Income		4,916	5,209	5,493	5,935	6,479	7,093	7,783	8,549	9,394	10,334
Operating Income (BFIT)		3,266	3,789	3,931	4,217	4,589	5,014	4,496	6,034	6,627	7,290
Debt Interest		0	0	0	0	0	0	0	0	0	0
Income Taxes		1,110	1,288	1,336	1,434	1,560	1,705	1,869	2,051	2,253	2,479
Amortization of Goodwill		195	195	195	195	195	195	195	195	195	195
Net Income		1,961	2,305	2,399	2,588	2,834	3,114	3,433	1,787	4,179	4,616
Loss Ratio		75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%
Expense Ratio		23.5%	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%
Combined Ratio		98.5%	102.1%	102.1%	102.1%	102.1%	102 1%	102.1%	102.1%	102.1%	102.1%
STATEMENT OF CHANGES IN FINANCIAL POSITION											
Funds Added:											
Net Income		1,961	2,305	2,399	2,588	2,834	3,114	3,433	3,787	4,179	4,616
Amortization of Goodwill		195	195	195	195	195	195	195	195	195	195
Contributions to Surplus		0	0	0	0	0	0	0	0	0	0
Funds Used:											
Debt Principal Payment		0	0	0	0	0	0	0	0	0	0
Dividends to Stockholders		2,156	2,500	1,461	1,170	1,254	1,357	1,430	1,620	1,776	1,953
Net Increase in Funds		0	0	1,133	1,613	1,775	1,952	2,147	2,362	2,598	2,858
SUMMARY BALANCE SHEET ITEMS											
Insurance Company Subsidiary:											
Invested Assets	79,000	84,869	88,750	95,479	103,971	113,767	124,609	136,984	150,353	165,388	181,927
Loss & Loss Expense Reserves	53,000	49,869	51,750	55,145	59,604	64,964	70,925	77,932	85,395	93,935	103,329
Unearned Premium Reserves	11,000	20,000	22,000	24,200	26,620	29,282	32,210	35,431	38,974	42,872	47,159
Net Worth (Surplus)	15,000	15,000	15,000	16,133	17,747	19,521	21,473	23,621	25,983	28,581	31,439
Holding Company:											
Net Worth of Subsidiary	15,000	15,000	15,000	16,133	17,747	19,521	21,473	23,621	25,983	28,581	31,439
Goodwill	3,900	3,705	3,510	3,315	3,120	2,925	2,730	2,535	2,340	2,145	1,950
Total Assets	18,900	18,705	18,510	19,448	20,867	22,446	24,203	26,156	28,323	30,726	33,389
Debt Outstanding	0	0	0	0	0	0	0	0	0	0	0
Net Equity	18,900	18,705	18,510	19,448	20,867	22,446	24,203	26,156	28,323	30,726	33,389
Total Liabilities	18,900	18,705	18,510	19,448	20,867	22,446	24,203	26,156	28,323	30,726	33,389
INVESTORS CASH FLOW AND RETURNS											
Purchase Payment	(18,900)										
Stockholders Dividends		2,156	2,500	1,461	1,170	1,254	1,357	1,480	1,620	1,776	1,953
Hypothetical Sale Price:											
Book Value Multiple						24,597	27,057	29,762	32,738	36,012	39,614
P/E Multiple						27,533	30,082	32,979	16,202	39,763	43,739
ROI:											
Book Value Multiple						13.1%	13.5%	13.7%	13.9%	14.1%	14.2%
P/E Multiple						15.3%	15.2%	15.1%	15.1%	15.1%	15.1%

LEVERED PURCHASE
W.C. Protective

AMTS IN $ 1000

EXHIBIT III
CAS May 1987

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
PRO FORMA OPERATING INCOME PROJECTIONS											
Written Premium		40,000	44,000	48,400	53,240	58,564	64,420	70,862	77,862	85,744	94,318
Earned Premium		31,000	42,000	46,200	50,820	55,902	61,492	67,641	74,406	81,846	90,031
Incurred Losses		23,250	31,500	34,650	38,115	41,927	46,119	50,731	55,804	61,385	67,523
Selling Expense		3,200	3,520	3,872	4,259	4,685	5,154	5,669	6,236	6,859	7,545
General & Admin. Expense		6,200	8,400	9,240	10,164	11,180	12,298	13,528	14,881	16,369	18,006
U/W Profit		(1,650)	(1,420)	(1,562)	(1,718)	(1,890)	(2,079)	(2,287)	(2,516)	(2,767)	(3,044)
Invest Income		4,916	5,209	5,493	5,935	6,479	7,093	7,783	8,549	9,394	10,334
Operating Income (BFIT)		3,266	3,789	3,931	4,217	4,589	5,014	4,496	6,034	6,627	7,290
Debt Interest		1,512	1,396	1,238	1,174	1,134	1,084	1,020	939	839	717
Income Taxes		596	813	915	1,035	1,175	1,336	1,522	1,732	1,968	2,235
Amortization of Goodwill		195	195	195	195	195	195	195	195	195	195
Net Income		963	1,384	1,582	1,813	2,085	2,399	2,760	3,167	3,625	4,143
Loss Ratio		75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%
Expense Ratio		23.5%	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%
Combined Ratio		98.5%	102.1%	102.1%	102.1%	102.1%	102.1%	102.1%	102.1%	102.1%	102.1%
STATEMENT OF CHANGES IN FINANCIAL POSITION											
Funds Added:											
Net Income		963	1,384	1,582	1,813	2,085	2,399	2,760	3,167	3,625	4,413
Amortization of Goodwill		195	195	195	195	195	195	195	195	195	195
Contributions to Surplus		0	0	0	0	0	0	0	0	0	0
Funds Used:											
Debt Principal Payment		1,158	1,579	644	395	505	642	807	1,000	1,222	1,460
Dividends to Stockholders		0	0	0	0	0	0	0	0	0	0
Net Increase in Funds		0	0	1,133	1,613	1,775	1,952	2,147	2,362	2,598	2,858
SUMMARY BALANCE SHEET ITEMS											
Insurance Company Subsidiary:											
Invested Assets	79,000	84,869	88,750	95,479	103,971	113,767	124,609	136,984	150,353	165,388	181,927
Loss & Loss Expense Reserves	53,000	49,869	51,750	55,145	59,604	64,964	70,925	77,932	85,395	93,935	103,329
Unearned Premium Reserves	11,000	20,000	22,000	24,200	26,620	29,282	32,210	35,431	38,974	42,872	47,159
Net Worth (Surplus)	15,000	15,000	15,000	16,133	17,747	19,521	21,473	23,621	25,983	28,581	31,439
Holding Company:											
Net Worth of Subsidiary	15,000	15,000	15,000	16,133	17,747	19,521	21,473	23,621	25,983	28,581	31,439
Goodwill	3,900	3,705	3,510	3,315	3,120	2,925	2,730	2,535	2,340	2,145	1,950
Total Assets	18,900	18,705	18,510	19,448	20,867	22,446	24,203	26,156	28,323	30,726	33,389
Debt Outstanding	15,120	13,962	12,383	11,740	11,345	10,839	10,198	9,391	8,390	7,168	5,688
Net Equity	3,780	4,743	6,127	7,709	9,522	11,607	14,006	16,765	19,933	23,558	27,701
Total Liabilities	18,900	18,705	18,510	19,448	20,867	22,446	24,203	26,156	28,323	30,726	33,389
INVESTORS CASH FLOW AND RETURNS											
Purchase Payment	(3,780)										
Stockholders Dividends		0	0	0	0	0	0	0	0	0	0
Hypothetical Sale Price:											
Book Value Multiple						24,597	27,057	29,762	32,738	36,012	39,614
P/E Multiple						27,533	30,082	32,979	36,202	39,763	43,739
ROI:											
Book Value Multiple						45.4%	38.6%	34.3%	31.0%	28.5%	26.5%
P/E Multiple						48.8%	41.3%	36.3%	32.6%	29.9%	27.7%

PRO FORMA
W.C. Protective
CAS May 1987

EXHIBIT IV

PURCHASE VALUE CALCULATION: (ACTUARIAL CONSULTING MODEL)

Stated Surplus	15,000
Mkt Value Adjustments	0
Adjusted Book Value	15,000
PLUS: P.V. Runoff:	
Claims O/S (12%)	5,263
UPR (16%)	1,329
Renewal WP (20%)	2,526
NET PURCHASE VALUE	24,117

ADJUSTMENTS

	Market Value	Statutory Value
Reserves Redundancy	0	0
Mkt - Book Value Bonds	0	0
Stacked Ins. Co.	0	0
Real Estate	0	0
Pension	0	0
Retiree Health/Life	0	0
Lawsuits/Contingencies	0	0
TOTAL	0	0