

RECORD OF SOCIETY OF ACTUARIES 1979 VOL. 5 NO. 4

LIFE COMPANY PERFORMANCE MEASURES AND PRICING

*Moderator: JAMES W. KEMBLE. Panelists: JAMES W. PILGRIM,
RAYMOND D. NACIN, BURNETT A. HALSTEAD, JR.*

1. What are appropriate performance criteria?
 - a. In terms of financial results
 - b. In terms of growth
2. How are goals established?
 - a. For Mutual companies
 - b. For Stock companies
3. What measurement tools do we use?
 - a. Comparison of actual to expected results
 - b. Compound growth rates
 - c. Rules of thumb for various performance ratios
 - d. Analysis of source of earnings
4. How are results used in pricing?
 - a. Pricing consistent with goals; are goals consistent with projections?
 - b. Problems relating to allocation by line

MR. JAMES W. KEMBLE: Our purpose today is to present philosophies and techniques from various backgrounds relating to the subject of performance measurement and pricing. The panelists are Ray Nacin, Vice President and Chief Actuary of Penn Mutual Life; Burnett Halstead, Chief Actuarial Officer of Federal Kemper Life Assurance Company; and Jim Pilgrim, Regional Reinsurance Director for Connecticut General.

Much interest has developed recently concerning the subject of life insurance company performance measures and pricing. Papers have been written and discussions generated covering the areas of appropriate surplus levels for mutual companies, the ability to generate a reasonable profit from non-participating permanent life insurance, term insurance premiums (highlighted by resulting deficiency reserve problems), high guaranteed interest on annuity policies, and consumer-oriented developments such as cost disclosure.

Performance measurement is not only a basis for pricing. It is also used as a basis for developing executive and sales incentive programs. For stock companies, performance measurement is presumably the basis for determining the market price of the company's common stock, or the price that someone is willing to pay to acquire an entire company.

MR. RAYMOND J. NACIN, JR.: Based on my experience, one excellent framework for performance criteria is a management by objectives (MBO) approach to measurement which emphasizes measurable end results. I feel the most appropriate set of financial results to focus on is page 5 of the Annual Statement by line of business, especially the controllable items such as earned

premium, investment income, benefits, taxes, expenses, dividends, bottom line, and surplus (including MSVR). The time frame within which these various items may be changed varies by item, but they are all controllable. I prefer to examine breakdowns by company, by line of business, and by product.

The growth criteria that I prefer to examine are new annualized premium (by line and by product), earned premium by line, after tax investment return, expenses, bottom line, surplus, and return on investment (ROI). It is valuable to compare these various growth rates to the growth rates of competitive companies. I also review percentage increases in face amount, number of policies, average premium per thousand, and average premium per policy. It is important to thoroughly examine results which are at extreme variance with other companies.

The process of goal setting does not vary dramatically between mutual and stock companies, although the performance measures will differ. I define a goal to be a measurable end result. The MBO process of setting goals in a mutual company can be described as defining a corporate purpose, resulting responsibilities, associated long and short range measurable end results, and supporting strategies and operating plans. A priority should be attached to each of these end results.

The actual goal setting process tends to be trial and error. Goals are set, a forecast is made and examined, and a plan is developed to achieve the desired goals. If results are unacceptable, or if a realistic supporting plan cannot be developed, adjustments are made until an acceptable set of goals and plans is developed. Hopefully, the goal setting process is a negotiation that results in a commitment on the part of those responsible for implementation. The strategies and operating plans should be detailed enough to guide operating managers in their day-to-day decision-making activities.

Once goals are established, periodic monitoring of actual to expected results is important. This can be done in terms of actual versus expected plans implemented and costs incurred. Major deviations from expected should be examined and explained. Necessary adjustments should be made in order to meet yearly expected results. In addition, I like to compare actual results to those previously forecasted in order to assess forecasting techniques. Key operating statistics such as premiums, claims, and expenses are examined on a monthly basis for deviations and adjustment.

There are many rules of thumb which I use for evaluating various performance ratios including such things as bottom line amounts, surplus in absolute dollar terms and as a percentage of assets (our goal at Penn Mutual is 6%), ROI between 10% and 25% depending on the risk involved, loss ratio levels, and product profit measures (break-even year, profit per \$1000, rate of return on invested surplus, and actuarial margin). I also examine company earnings by source by line, by product, by year of issue, and old form gain and loss, i.e., mortality, surrender, investment, expense, etc.

With respect to product pricing and developing dividend scales, the old line mutual company approach has been to use actual rather than expected experience. Mutualls have distributed dividends after the fact, comparing actual experience to product assumptions, and adjusting the dividend scale for differences. It may be that competitive mutual companies are finding that dividend scales tend to become "locked in" benefits.

Goals are set to be challenging but achievable. Therefore the assumptions used in establishing goals may not be appropriate for pricing. Goals are also not the same as forecast, but it may turn out that some iteration of the forecast becomes a financial goal. Projections based on a worst possible, expected, or maximum probable basis may not be appropriate for product pricing. It is critical that product pricing and the financial assumptions are consistent so that product profits eventually get translated into statement profits. If an Anderson approach is used in product pricing, a company cannot grow any faster over the long run than the internal rate of return in the product.

There are many problems relating to allocation by line and product. One such problem is competition with a company if lines are run by different people. New lines tend to be placed on a marginal expense basis for window dressing. Allocating overhead is always difficult - new lines never want to pay overhead. Other items which become difficult to allocate are federal income taxes and risk charges. Unless the allocations are realistic, consistent, and fully cover overhead, wrong decisions are made.

MR. BURNETT A. HALSTEAD, JR.: My comments today will describe how we determine goals and measure performance at Kemper. To put these comments in perspective it will probably be helpful to briefly describe our two life companies - Federal Kemper Life and Fidelity Life Association. Federal Kemper is a stock Company which is 100% owned by Kemper Corporation. Kemper Corporation, in turn, is a downstream holding Company 51% owned by Lumbermens Mutual. Lumbermens is a mutual casualty company, and is the ultimate parent of all the Kemper companies. Federal Kemper is active in the individual life market - particularly term. It is modestly active in group life and individual annuities but not in any other line. Fidelity Life Association is a mutual life company. It is affiliated with and managed by Kemper. Fidelity Life is relatively inactive in the market at this time.

Goals for our two companies are established as part of an annual planning cycle. This cycle typically begins in the fall of each year. The first thing established is the earnings desired for the following year. Generally this is a flat percentage increase over anticipated earnings for the current year. These earnings are GAAP earnings for the stock company and statutory earnings for the mutual company.

The next thing established is how much new business is needed to generate these earnings. New business is helpful in the case of the stock company but not helpful and perhaps even harmful in the case of the mutual company in the short run. Earnings for the new business is based on profit margins in existing products at the time the projection is made.

New business requirements are reviewed by the marketing, administrative and other departments to determine their reasonableness. If acceptable they become the basis for the following year's plan. If unreasonable, new goals are tested in the same way until a satisfactory plan evolves. Based on these plans all departments are asked to submit action plans and budgets. These budgets and other plan details are worked out at a management conference. As a result of the conference everyone is made aware of his responsibilities for the following year. Our parent company encourages as rapid growth as is reasonably possible. This encouragement takes the form of any necessary surplus infusion needed to sustain the growth. While plans are prepared in great detail for the following year, plans are also extended

for four additional years on a broader basis. These provide a longer term direction which is very helpful. Once plans are finished and the year begins, monthly financial reports are prepared which compare actual to planned figures. These reports are comprehensive and show which lines are lagging and which ones are exceeding expectations and why. They provide a valuable tool for management.

Pricing is influenced indirectly by the comparison of actual to planned results. If we earn more than expected, which has been the case, there is a tendency to lower prices. This is especially true if margins appear to be adequate and significantly more new business can be obtained as a result. Lowering prices, however, is not taken lightly, especially if profit margins are affected. Lower margins mean more business has to be written to generate the earnings our plans require. Any change in price is reviewed carefully from this standpoint. In most cases, reduction in prices for us has been accompanied by a basic product change which either did not reduce margins or actually increased them. In general our pricing is based on a combination of published data and company experience data. For example, our current GAAP mortality assumption is a variation of the 1965-70 table for most of our individual life plans. These pricing assumptions, however, generate a small part of our planned profits. Most of our actual earnings come from actuarial deviations. In the case of mortality our actual results have for a number of years been running at about 60% of GAAP expected.

It should be clear our pricing is done in such a way that two types of earnings are generated. One is planned earnings. The other is actuarial deviations. Currently actuarial deviations are considerably more important. Both types of earnings are projected when we develop our plans.

Much of the planning and pricing procedure has been or is in the process of being computerized. We are currently finishing a comprehensive program to provide future expected financials for any combination of issue age, product and line. This program generates expected GAAP, statutory and value added earnings on a year by year basis for any number of projected years in the future. It can be used for any specific age-product combination, or for a composite age distribution within product, or for a model office consisting of specific age-product combinations. The program is used to measure actual versus expected GAAP performance and actuarial deviations for all statement items. The program is used in lieu of more traditional asset share approaches in pricing. It is used in making projections in our planning process. It is also used to measure performance and to reveal sources of gains or losses.

These comments, briefly, reflect our approach to performance and pricing at Kemper. We have been using this approach since 1973. Prior to that date the companies had no similar process in effect. The before and after effects are very striking. New sales had stabilized at about 200 million per year for some number of years and earnings were correspondingly low. The earnings of the mutual company, in fact, were so poor that a number of insurance departments were concerned. Best's even removed its rating. Since 1973 results have been remarkable. The combined new sales have grown to over 3 billion per year. In the stock company GAAP net earnings have grown from \$400,000 in 1972 to over \$7,800,000 in 1978. Statutory earnings have grown from \$180,000 to \$5,700,000 over the same period. In the mutual company statutory earnings have grown from a minus \$600,000 to a plus \$3,500,000 for the same periods. Even more striking is the fact that these significantly higher profits have been achieved by switching from a high price permanent life type portfolio of products to a low price term type portfolio of products.

Setting performance standards and carefully measuring performance has been successful from our point of view. Our goal of 20% to 30% annual earnings increase turned out to be very conservative. Our actual earnings growth has averaged over 50% per year since we started the program. Our ability to utilize performance standards has undoubtedly been simplified by the relatively small size of our companies and the narrow range of products offered. We can see more difficult years ahead as we grow larger and broaden our product line. Although we see problems and room for improvement, we feel our basic measurement concepts are sound. We expect problems will be solved by an evolutionary process of year to year improvements in our basic system. For example, we have been dissatisfied with the use of statutory accounting to measure our mutual company performance. We find it counterproductive since it leads to artificial limitations on new business growth. We are currently working on a GAAP approach for the mutual company and hope to switch to it within the next few years.

MR. JAMES W. PILGRIM: With respect to performance criteria for financial results and growth, I believe that whatever criteria are selected to measure performance for financial results should be:

1. capable of being measured consistently and objectively.
2. based on information that is readily available and usually kept for purposes other than to just measure performance.
3. based on criteria that are reasonable and fairly specific, and
4. based on factors that everybody in the enterprise can influence or manage and not factors that are totally outside the control of management.

It seems to me that one of the objectives in establishing performance measures is to reduce as much as possible the likelihood of "surprises" occurring in the actual results. If the total enterprise performs in accordance with the criteria used then the results achieved ought to be as expected, or else there should be good and proper reasons for the unanticipated results that usually can be attributed to factors outside the influence and control of the enterprise.

Performance criteria for financial results usually relate to quantifiable "bottom line" results however they are measured (e.g. statutory net gain from operations, or changes in statutory surplus, or GAAP earnings or changes in GAAP surplus). Performance criteria for financial results may also be measured on a unit basis, taking into account changes in the business base from year to year.

Performance criteria for measuring growth are usually set on an aggregate basis and relate to changes in revenue or business in force, to use a couple of examples. Performance criteria for measuring growth may also relate to measures of efficiency in managing the enterprise. For example, a combination of criteria for measuring growth and financial results might be to relate the rate of increase in total expenses from year to year to the rate of increase in total revenues from year to year.

In the establishment of goals for mutual companies and fraternal versus those of stock companies, if we can accept the premise that we are all in business to provide solutions to problems, then I do not see any real difference in how goals are established among the different types of companies in our industry. It seems to be that we establish goals that are consistent with our objective of providing the best solutions possible to the problems presented to us, and these problems give us the opportunities to provide solutions. I do, however, see some potential for differences in what goals are established depending upon the type of company. In the case of the mutual companies and fraternal we are really dealing with two classes of people whose needs we must satisfy - the policyholders and the employees. In the case of stock companies, there is a third group of individuals involved - the shareholders. In any case the goals that are established are usually consistent with the basic objectives of the company. My experience has been that the goals are established by company management after drawing on all available sources of information.

Usually there is considerable discussion and debate between various members of management concerning whether or not a specific goal is realistic and attainable and worthy of the time and effort expended to reach that goal. In most instances there are various compromises made between the "ideal" goal and one that is realistic. It usually is the case that the goals agreed upon are attainable, but only if the individuals in the enterprise are willing to put forth their maximum effort and work up to their fullest potential. Rarely is a goal agreed upon that involves only very little effort and a "Ho hum business as usual" attitude.

Once the goals are established they are communicated throughout the enterprise so that each individual knows what is expected of them to attain the goals and how their individual performance will be measured periodically. By bringing corporate goals down to individuals, the usual natural result is that there is total commitment to attaining the goals and a real team effort made to accomplish the objectives.

During the time span for which the goals are established, the actual results are periodically related to the expected results. For many of the goals these measurements are made monthly; some are measured quarterly and some only annually. In addition, if we are talking about "bottom line" financial results, then we will also analyze the contributions to surplus by source (e.g. mortality, morbidity, interest, expenses and capital gains and losses). For many of the measurements of results we will also examine compound growth rates, but this is usually done no more frequently than quarterly or annually.

Setting performance criteria for financial results and growth and establishing goals, and then measuring results, involves numerous channels of communication. By keeping these channels of communication open in all directions, and having good performance standards for all parties involved, the result is that pricing of products will be consistent with the goals established and agreed upon, and the goals will be consistent with the objectives. The goals and objectives become an integral part of the performance standards for individuals at practically all levels in the company. Using a pricing posture that is consistent with these goals is essential to the successful attainment of the performance that meets standards. The compromising takes place before the goals are set, not after they are in place. It might very well be the case that after goals are set, based on some critical assumptions concerning factors outside of the sphere of influence of the enterprise, one

of the critical assumptions proves to be invalidated based on changes in conditions. At that point in time the affected goals are re-examined and possibly changed. Then the pricing posture is made consistent with the revised goals.

MR. JOHN C. ANGLE: Is the field force involved in the development of corporate plans and if so how?

MR. PILGRIM: My experience has been that the field force has a heavy involvement in the planning process. At Connecticut General, sales goals are set very early in the planning process. These goals, which include amount of sales and product mix, are set by the sales offices.

MR. GARY CORBETT: Are you asking your field force to set goals or predict sales results? These two items are not the same.

MR. PILGRIM: We are asking our field force to set specific measurable goals, not to project results.

MR. JOHN O. MONTGOMERY: I am chairman of a current NAIC task force whose charge is to devise a set of reports on profitability of life and health insurance. This task force was organized as a result of growing public concern about profit levels of insurance companies. Out of this will come a report showing sources of profit by line of business for the industry as a whole.

MR. LOUIS M. WEISZ: Do you look outside the insurance industry to other financial institutions when setting goals?

MR. NACIN: I think it is a valuable exercise as long as valid differences between industries are recognized.

MR. L. JEFFERSON STULCE: There is not much point in setting goals unless there exists the perception of accountability for achieving those goals. When stretch goals are set for marketing people, cost containment people and others, it must be recognized that goals will not be achieved 100% of the time. Could anyone comment on the practical process of moving from established goals to the production of results that you want to present to your board?

MR. NACIN: I believe that anytime you find yourself in a position of being hamstrung by planning, you probably need to revise your plans. It is important to set a number of various goal levels which create a realistic range of acceptability. Such goal levels might be minimum acceptable, expected, and maximum probable.

MR. OWEN A. REED: Some reference was made to analysis of earnings by year of issue. What sort of analysis is this?

MR. NACIN: I like the page 5 approach of analyzing various blocks of business. I realize that allocations are difficult, but it is important to determine what was done for the company in a given year. If it is discovered that the current year's net gains were all generated from business issued 10 years ago, that has some dramatic implications.

