

**HOW TO SUCCESSFULLY MANAGE THE
PRICING DECISION PROCESS**

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BY MICHAEL J. MILLER

Biography:

Mr. Miller is a management and actuarial consultant with Tillinghast in its Bloomington, Illinois office. Prior to joining Tillinghast, he was an actuary with State Farm Insurance. He graduated from Illinois State University in 1968, became a Member of the American Academy of Actuaries in 1975 and a Fellow of the CAS in 1981.

Abstract:

Determining insurance prices certainly has actuarial implications, but it's too important to be left solely to actuaries. Insurers which successfully manage the pricing decision process all recognize pricing as an integral part of the annual operational planning process. Good pricing decisions are designed to produce the planned financial results by coordinating actuarial, underwriting, marketing and claim considerations.

This paper discusses both the common characteristics of well-managed pricing decisions and the characteristics of pricing decision processes which have often been unsuccessful. The roles which an actuary can, and should, play in the pricing decision process are also identified.

INTRODUCTION

In the property/casualty insurance business, the term "pricing" implies something that is of an actuarial nature. Indeed, expected costs are an important foundation of insurance prices and actuaries are recognized as being uniquely qualified to determine those expected costs. But insurance pricing often reflects considerations beyond the determination of expected costs. Underwriting, marketing, legal and other business considerations may all cause the price charged to be different than the actuarially determined expected cost. This means that while insurance pricing involves actuarial considerations, it may not be restricted to considerations which are purely actuarial in nature.

If one accepts the notion that pricing goes beyond the sole domain of the actuary and the actuarially indicted expected costs, the question for management then becomes how to coordinate and integrate all of the affected disciplines into a rational and effective pricing decision. Establishing an effective pricing decision process is important because pricing is one of the most important decisions made by management. If management does not have the expertise to price its own product, then it logically follows that it does not have the ability to prepare its own operating plan or effectively manage its own business. In short, if an insurer is not prepared to price its own product, then it should not be licensed by the regulator to do business.

Over the years this author has been requested by a number of insurers to evaluate their pricing decision processes. The emphasis of these studies has seldom been on specific pricing decisions, but rather on how the decisions were made, what information and factors were considered and who on the management team was

involved. These consulting studies have typically involved a complete assessment of the management information system, as well as the operational procedures of the actuarial, underwriting, marketing and claims functions. The studies have been conducted for both large and small insurers, for both those making independent pricing decisions and those relying on rate bureaus, and for both those with actuaries and those with no actuaries. Having observed and studied the different procedures actually used by insurers in make pricing decisions, a number of common characteristics of both successful and unsuccessful pricing decision processes have been identified.

CHARACTERISTICS OF UNSUCCESSFUL PRICING DECISION PROCESSES

Distrust of Data

Historically, the U.S. property/casualty insurance has relied heavily on bureaus to consolidate data and promulgate benchmark rates or loss costs. It is argued that such benchmarks are necessary because many insurers have data of insufficient credibility for ratemaking purposes, especially at the risk classification level. Unfortunately, the justifiable need for an industry data base is often stretched in an attempt to rationalize the unjustified need for benchmark rates or loss costs. Every insurer has, or should have, the expertise to develop its own projection of future costs, even if that projection is based entirely on industrywide data. Without the expertise to project the future, the insurer cannot develop its own operating plan. Without a meaningful plan, effective management cannot occur.

This widely held trust in industry consolidated data and projected costs has led some insurers to completely discredit their own data. Some insurers do not even bother to produce important management and ratemaking information because the data supposedly lacks credibility. In extreme cases, even exposure data is not available. No insurer, large or small, can effectively manage and price its product without knowing all there is to know about its book of business and how that business has changed, or is changing, over time. The failure to have readily available premium, loss and exposure information demonstrates a naive understanding of the concept of credibility and a complete misunderstanding of the concept of partial credibility.

No Actuarial Analysis

Actuarial rate change indications are based on a projection of expected costs and do not reflect the competitive and legal considerations which also often influence pricing. Insurers with weak pricing decision processes typically follow one of two approaches with regard to rate change indications. Either it is assumed that actuarial rate change indications are a waste of effort and no attempt is made to project losses and expenses, or the calculation of the rate change indications is adjusted to produce rates which are deemed to be competitive. It is difficult to know which of the two approaches is worse. Both of these approaches to pricing are totally market driven and both fail to recognize that rate change indications are an integral part of the planning process. The underlying premise is that "we can only charge what the market will allow, so any actuarial indication that differs from the market rate is useless."

Rate change indications should be viewed as a quantitative diagnostic tool for determining expected costs. If an insurer does not know its true rate needs, then it cannot know if the rates dictated by the market are sufficient to produce its planned or target returns. Once future expectations are determined, informed discussions can take place as to how to respond to those expectations. If the market dictated prices are too low, an insurer must know what other actions (e.g. changes in underwriting rules, marketing emphasis or claims handling) are necessary in order to produce the planned results. Implementing all or part of the rate change indication is just one alternative for management to consider.

Incomplete Competitive Analysis

Insurers with weak pricing decision processes tend to spend too little time analyzing the competitive market. Anecdotal information from the sales force is important, but does not provide a complete picture. Comparing a few base rates for one or two selected classes of business, or relying entirely on a comparison of average rates, does not begin to identify the mismatches in territory and risk classification definitions and all of the special discounts and rating rules which create competitive problems.

Another frequent shortcoming of some insurers is that the competitive analysis is limited to a few "peer" companies. Such a comparison can be helpful, but one should be careful to include at least one or two insurers in the analysis which are very successful in the market. As in most businesses, it is not a winning strategy to be the best in a subgroup of struggling competitors. In the long-run, one must find ways to compete with the winners, even if they are not presently considered to be in the peer group.

No Awareness of Corporate Profit Requirements

Many insurers have historically calculated rates utilizing some predetermined underwriting profit provision, such as 0%, 2.5% or 5.0%. Such a pricing strategy can be successful in the long-run if, and only if, the profit provision in the rates has a logical relationship to the targeted corporate return on equity.

Insurers with weak pricing decision processes often do not communicate their corporate profit goals to those personnel involved in the pricing decision process. The profit provisions used in the rate calculations are typically heirlooms from the past and no one has made an effort to directly relate those profit provisions to the target return in the current corporate plan.

Operating Plan Not Actively Used As A Management Tool

Insurers with poorly managed pricing decisions either have no operating plan or prepare an operating plan at the beginning of the fiscal year and then disregard it until the end of the year. Prices are established to respond to last year's underwriting results or to meet current market conditions and appease complaints from the marketing department. There may also be some unquantified attempt to tighten underwriting rules, or perhaps a new program for "preferred" risks is invented with the hope of regaining a competitive edge. Typically, these actions are not unified in the sense of quantifying the expected impact on the current operating plan. If the actual profits at the end of the year miss the targets, there is a collective scramble to fix things quickly and the usual declarations are made that results will be better next year.

It is possible to manage the financial results of a property/casualty insurer, despite the cycles of hard and soft markets. But successful management of results requires a recognition that pricing and planning are tightly intertwined. If market conditions prevent achieving profit goals solely through pricing activities, then some adjustment must be made in underwriting and/or marketing. The type of adjustment and extent of the adjustment can be coordinated and managed only if one knows how far the prices are off the mark and an attempt is made to quantify the expected impact of the underwriting and marketing changes.

Pricing Decision Delegated Too Far Down In The Organization

It is an axiom that achievement of profit targets requires the coordination of the viewpoints of the actuarial, underwriting, marketing and claims functions. The insurers with weak pricing decision processes often have allowed one or two of the four functions to dominate the decision. The only way to prevent this imbalance is to have the final decision on pricing reviewed by a senior executive, preferably the CEO. The senior executive need not be involved in the development of the details of the proposal, but should be informed as to the impact of the contemplated rate action on the customers, the expected profits (or losses) arising from the new rates, and any necessary adjustments in underwriting and marketing to bring the expected results in line with the operating plan.

CHARACTERISTICS OF SUCCESSFUL PRICING DECISION PROCESSES

Information, Information, Information

It is an old cliché, but insurers with strong pricing decision processes understand that the three most important elements of a successful insurance operation are information, information and information. These insurers seem to understand that knowing all there is to know about a book of business, even a new or a very small book of business, gives them a competitive edge in pricing their product and managing their business.

Contrary to conventional wisdom, it is not just the giants of the industry which have good management information systems and the confidence to independently price their product. All insurers (large and small, new and old) are capable of independently pricing their product if a good management information system is in place and the staff has sufficient expertise to utilize the internal data in conjunction with industry data and other publicly available information. No insurer should be permitted to issue its first policy until a complete information system is operative. To do otherwise is a bit like allowing a doctor to perform major surgery and then later learning that the hospital failed to install the equipment necessary to adequately monitor the patient in the recovery room.

Objective Actuarial Analysis

All good pricing decisions begin with an objective actuarial projection of future costs. Sometimes the rates indicated by the actuarial analysis cannot be charged

in a competitive marketplace, nor can they be expected to be approved by the regulator. But no matter how bad the news, it is important that the actuary not shade the indicated rates just to produce competitively or politically "acceptable" rates. To do so is to withhold important cost information and effectively take a crucial management decision out of the hands of the management team.

Thorough Competitive Analysis

There is a great amount of competitive information and market intelligence data available and a limited capability to digest all of the data. The insurers with the best pricing decision processes are learning to rely on new computer technology to not only monitor competitor's rates, but also identify profitable market niches. For example, the computer technology makes it possible to identify profitable marketing opportunities for personal insurance. These market niches arise by identifying out-dated rating territory definitions and overlapping risk classification definitions and analyzing publicly available demographic data.

Profit Objective Disciplines Management

Financial theorists and model-builders can convincingly prove that for many property/casualty insurance lines of business an underwriting loss, when combined with investment income, can produce a fair and reasonable total return. The problem with many financial theories is that no consideration is given to the human factor in the management of an insurance company. In an insurance operation where an underwriting loss is considered to be acceptable, management

discipline is always diminished. A marginal risk which an underwriter would otherwise reject is now accepted or an unprofitable agency which would have been corrected immediately by the marketing manager is tolerated for another month or two.

The best managed insurers have a clearly stated profit objective which is part of the corporate culture. Some insurers state the profit goals for the operating divisions and branch offices in terms of total profits, some state the goals in terms of operating profits and some state goals in terms of underwriting profits. But however stated, the objective is always described with the word profit. Some may view this as only semantics, but reference to a "loss" in the corporate goals is the wrong word choice.

Insurers exhibiting a high degree of management discipline tend to have goals stated in terms of underwriting profits because that is the result that the division and branch managers can control. Operating profit targets are also used successfully by some insurers, but such targets do involve an investment return which is out of the control of the division and branch managers. Profit targets which are the least successful in instilling management discipline tend to be stated in terms of total returns. Total returns have the least impact because such targets depend on an arbitrary allocation of surplus and investment income to individual lines of insurance, operating divisions and/or branch offices. When the performance of a line manager is judged on a total return basis, there is a tendency for the manager to spend too much time trying to understand and change the allocation formulae for personal advantage, rather than concentrating on managing the business.

Accountability

In a well-managed pricing decision process, all the players have a sense of accountability. The successful insurers tend to allow division and/or branch managers to charge less than the actuarially indicated rates if they have a plan to make-up the difference, such as tightening underwriting or slowing growth. The marketing manager who claims that lower rates will tend to improve the quality of the book of business, or the underwriter who is certain that new underwriting rules will cause improvement is generally given the leeway to implement the program, at least once. But these concessions to professional judgments only make sense if the managers are accountable for the actual results.

Accountability can only exist if two conditions are met. The management information system must be designed to provide the actual results necessary to monitor the effect of the decisions and the managers must be in place long enough to live with their decisions. The accountability factor may well explain why there appears to be a correlation between insurers with a history of good pricing decisions and insurers with a stable staff.

Accountability is also important in the determination of the actuarially indicated rates and the projection of profits arising from the new rates to be implemented. There are a number of ratemaking models which are logically sound, both from an actuarial and a financial theory viewpoint, but cannot be easily verified retroactively for accuracy by actual financial results. This is a delightful situation for the actuarial theorist who can probably never be proven wrong, but an unacceptable situation for a well-managed insurance company. Even actuaries are held accountable in well-managed insurance companies.

Broad Role For the Actuary

The actuary plays a key role in the pricing decision process by conducting the initial analysis of the historic data, developing a projection of future costs and calculating the indicated cost-based rate action. But insurers with successful pricing decision processes tend to utilize their actuaries in an even broader role.

Actuaries should be working closely with the marketing people to not only ascertain the competitive situation, but also identify profitable market niches. Sometimes loss ratios can be improved and rate increases avoided by simply shifting marketing emphasis from one market to another. Too often in the past, market analysis has consisted solely of identifying where people with sufficient purchasing power live and then placing an agent in that neighborhood. Actuaries are uniquely qualified to combine demographic data with profitability expectations to identify markets favorable for expansion. Much of this analysis can be based on data in the public domain which is equally available to large and small insurers.

Actuaries and underwriters should also be working closely together to arrive at good pricing decisions. The effect on loss ratios from a change in the rate of policy growth, or a change in policy retention levels, or a change in underwriting rules, or the introduction of a new insurance program are all quantifiable. The best managed insurers do attempt to quantify those changes, rather than rely on hunches, in an effort to keep their financial results on target.

Finally, no pricing decision is complete unless there has been an explicit calculation and communication of the profit expected from the rates implemented. This is critical management information for an insurer if planned financial results are to be achieved. The actuary is uniquely qualified to prepare this projection, but in so doing must be aware of all the changes going on within the company which affect the financial results, not just the rate change.

FINAL NOTES TO THE CEO

The Good, The Bad and The Satisfied

There are some insurers which exhibit all of the characteristics of a well-managed pricing decision process and for them the potential for further improvement is marginal. There is also a group of insurers which exhibit nearly all the characteristics of poorly managed pricing decisions procedures. The insurers which possess most of the bad characteristics tend to get into trouble fairly quickly and then, thankfully, take corrective action. The more serious challenge is with a large group of insurers that do enough things right to survive comfortably and enough things wrong to prevent the achievement of true excellence. This group of insurers is satisfied with its results. Until management considers the possibility that improvements may be possible, excellence will never be achieved.

Expense Budget versus Operating Plan

Throughout this paper there has been frequent reference to the need to compare actual and expected results to an operating plan. Most insurers implement an annual expense budget with varying degrees of success in controlling expenses. Surprisingly, not all insurers have an operating plan. A good operating plan

is stated on a market segment basis and includes not only the expected operating expenses, but also projected premium writings, projected claim losses and projected profits. No pricing decision process can be consistently successful unless there is a complete operating plan. The operating plan provides the benchmark against which all potential, alternate management decisions can be judged. With the advent of risk-based capital requirements, the need to manage against an operating plan will become increasingly apparent to many insurers because the alternative may well be unwelcome assistance from the regulator.

Inter-Discipline Conflict

Pricing decisions involve a balancing of actuarial, underwriting, marketing and claims considerations. While the existence of a reasonable degree of conflict between these four functions is a healthy and natural state of affairs, this natural friction can be frustrating to manage. Sometimes it appears that management would be easier and more efficient if each discipline could drop its narrow provincialism and adopt a better understanding of the "big picture."

All insurers tend to exhibit these inter-discipline frictions, but those with weak pricing decision management have no effective way of balancing the different inputs. The insurers with best pricing decision management tend to have good lines of communication between the disciplines, and the final decision-maker is able to properly balance the various viewpoints.

As tempting as it may be, one does not want to eliminate these inter-disciplinary conflicts and homogenize the management team. It becomes dangerous when an actuary tries to second guess the marketing manager, and the marketing person tries to think like an underwriter. Each discipline's input is important to the pricing decision. The trick is in coordinating or balancing the competing views in a way that will produce the budgeted results.