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EXPENSE ASSUMPTIONS IN PRICING

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1. What were the historical approaches to expense loadings in premium rates of life and casualty lines.
2. What are the fundamental differences in life vs. casualty expense assumptions?
3. Current changes.
4. Future possibilities.

MR. PAUL T. BOURDEAU: My comments will be directed primarily toward historical approaches and current changes. As we look back on the last ten years, we find that there was much emphasis on historical expense data derived primarily from accounting systems.

Until the double digit inflation of 1974, we thought, somehow, that inflation would go away and, therefore, we never gave the inflation of renewal expenses the thought and consideration we should have. In the recent past, there was a tendency to work only with total cost and there was almost a distrust or, at least a reluctance, to use any of the modern cost concepts such as sunk costs, variable costs, etc. There was an inclination to use one set of expense units for all types of situations and all types of analyses.

As time moves on, where has it taken us? More and more we have special expense studies that are not strictly a by-product of the accounting function. Computers have made this possible, by making this information easier to retrieve, but more importantly, computers have made the use of this information feasible. Moreover, there has been an increasing awareness of the need and value in economic analysis of some of the more sophisticated cost concepts. If time permits, we will discuss some of these.

The computer has led to finer breakdowns of the expense units. There has also been more interest in fine tuning historical data in order to represent the future. Another area that requires special consideration is developmental expenses; we spend considerable sums of money for developing agents, and data processing systems. One must be careful that the base year of an expense study is not overwhelmed with this type of expense. Such expenses should be amortized over the period of use. One should look at an agent or a data processing system as an industrial firm would look upon a lathe; they purchase the lathe and use it over a period of time and charge depreciation against current operations to allow for this. It may not be the most elegant way to say it, but you have to look at an agent or a data processing system like a lathe, every time you use it there is a little less there and, therefore, the use should be charged to current expenses.

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One can put inflation in perspective by listening to this tale. Ten years ago some of us, in our more casual pricing, would take the present value of benefits and load them for expenses and thus determine a premium. Now, one takes the present value of expenses and loads them for benefits. This is not totally true but it is amusing and indicative of the important role of inflation today. There is no doubt that we should allow for inflation in pricing. It is just a matter whether we allow for it explicitly or implicitly. The approach to inflating future expenses should be consistent with the interest rate assumption. If a conservative interest rate assumption, that is decreasing over time, is used, it does not make much sense to inflate the renewal expenses. On the other hand, if a relatively high, optimistic, level interest rate assumption is used, one should assume some inflation of future expenses.

The industry should encourage the use of more rigorous and varied cost concepts. We would be better off using precise and sound concepts and approximating the numbers rather than using unsound, approximate concepts with accurate numbers. In the past we have tended towards the less adequate concepts with available numbers. When you have unsound concepts with precise numbers, it is like building a skyscraper in a swamp.

In marginal pricing with variable expenses, we are often asked, "How do you know what expenses are variable?" In such situations, there are many judgment calls to make, but we submit that it is better to make these judgment calls in analyzing your problems than to work with less elegant concepts. Many problems and resulting solutions are sometimes not that sensitive to the particular level of expenses considered variable and fixed.

Basically, there are two ways of pricing. One way is to have a formula and assumptions from which a price is calculated and used. This is generally referred to as product pricing. The other way is to start with a price derived through competitive or other analysis, and then measure the financial effect on your operations of using this price. This latter approach is sometimes called product costing. There is a tendency to go toward the latter technique because pricing is really a tool to help attain a company's objectives whether these objectives are bottom line, volume, or agency related.

MR. JOHN B. CUMMING: My assignment this morning is the future possibilities part of this topic. Looking into the future is a highly speculative process at best. However, I think we can say with confidence that the future outlook is for increasing pressure on the expense margins included in pricing our products. A high rate of inflation appears likely to continue into the indefinite future. The productivity gains from computerization may have run out. Government programs continue to expand, narrowing our markets and offering low expense alternatives to private insurance. Competition for consumer savings has increased from banks and other intermediaries.

Since expenses are the component of our operations most subject to short-term management, they are likely to become even more of a concern in the future than they have been in the past. These developments will also force us to take a more systematic approach to marketing. Recent research has demonstrated that a high market share correlates very closely with a high return on investment and that alone should be enough to make us give more attention to this aspect of our business.

I would like to look at three alternative marketing strategies which affect the expense aspect of product pricing. A market harvesting strategy is appropriate for a product line with an uncertain future and from which the Company wishes gradually to withdraw. By failing to make the investments needed to maintain a strongly competitive market position short-term profits are increased but the volume of business will gradually drop off. Profits are thus harvested from the existing business. An example might be a company that has decided to deemphasize health insurance. It might pursue a harvesting strategy to maximize the profits that it can garner from the health business.

For their primary product most companies follow a second alternative, a market maintenance strategy. While the company might like to push these sales to high levels, it is unlikely that it could afford the capital drain that would be involved in forced growth. Thirdly, a market building strategy is appropriate for a new product introduction or for an existing product which the company hopes to build to a more profitable sales level. The aim in this instance is to build sales volume to a level adequate to support fixed costs.

Each of these strategies has implications for the expense aspect of pricing, but the connection is perhaps clearest for the market building strategy. When highly competitive premiums are the key to building sales, the expense component of premiums becomes critical. We, in the insurance industry, have long been reluctant to look at our costs on a marginal basis. Marginal costing is sometimes also referred to as differential or direct costing. Our conservative approach to expense analysis is appropriate as long as our primary focus is on maintaining equity among customers, products and product lines.

The marketing approach to product development and pricing forces us to question this traditional thinking. If we have an unsatisfactory market share for a product line which is a relatively insignificant part of the company's overall operations, we may improve aggregate financial results by taking a marginal approach to expense assumptions during the market building phase of product introduction. By improving the overall results all customers can benefit.

Of course, as the market building effort succeeds, and the product segment grows as a proportion of the company's overall operations, the product line must bear an increasing percentage of the company's overall overhead. For example, the allocation of overhead costs might be phased in form, say, 25% of normally allocated overhead for a product line in a zero sales position, to 100% of allocated overhead for a product line representing 20% or more of the premium revenues of the company.

Let us take a moment to review this subject from another perspective. Traditionally we have done little to look at the division between fixed and variable costs in our operations. In most insurance pricing we force the allocation of all costs on some unit basis as though all costs were variable. This practice, however, can be misleading. It may appear that dropping a product line may cut costs and improve aggregate profitability. It can then be a rude shock to see revenues drop in response to a management action, while expenses continue to increase, inexorably paced to the rate of general wage inflation in the economy.

It is interesting and stimulating to begin to consider how a company's operations ought to be divided between fixed and variable costs. Consider, for example, something that seems as obvious as agent's commissions. At first we would say that commissions are certainly a variable cost directly geared to agent productivity and the premiums generated by the agent's sales work. On the other hand, if the company has a commitment to maintain an agency force of a specified size, or to build its agency force, then its agents must be able to earn a living comparable to those in alternative careers. The company must offer the means for agents to achieve those earnings. Viewed in this way the commission income flowing to the agent begins to appear as more of a fixed cost to the company.

In this sense almost all of the operations of an established, stabilized company become more fixed than variable. Any drop in sales will hurt profits, and our aim must be to keep revenues advancing at a faster pace than expenses. The only alternative is a self-destructive surgery directed at the corporate organization. Yet, few companies have an explicit marketing and pricing strategy to ensure this needed revenue growth.

What does this tell us about future possibilities for product pricing? I believe that it tells us that as our business becomes increasingly competitive and difficult to manage, we are going to have to learn new disciplines of marketing and cost accounting from our associates in other businesses which have traditionally been highly competitive. This will be a difficult undertaking. Not all techniques which are effective, say, in managing package goods, can be readily transferred to the insurance business, but many concepts can be adapted to our operations. We may, for example, price our products to achieve a competitive or consumerist position dictated by our marketing aims. Expense assumptions would then be determined by the market place rather than by after-the-fact analysis. Health insurance, which I am sure some of you are familiar with, provides an example of consumerist pressure on expenses since the expenses are limited by minimum loss ratio requirements. We then have to manage our operations to achieve the predetermined results. This can lead to a direct performance standard, based on imputed revenues. A revenue/cost accountability can then replace the bureaucratic norm which, in all honesty, is still prevalent in our industry. The times ahead will be difficult, yet effective management can, and will, make the hard choices involved. The future belongs to those companies best able to make the transition.

MR. ANTHONY J. GRIPPA: The insurance rate or premium is made up of two components: the pure premium, or expected loss cost per unit of exposure, in workers' compensation-per $100 of payroll; and the allowance for expenses. The expense provisions in workers' compensation are expressed in terms of percentages. If one views loss costs as the product that the insurer provides, we have a system that shares a practice which is common to most of the American business spectrum. That is, the practice of providing for expense costs, and a hoped for profit, in the price charged to the consumer, by means of a mark-up on the cost of the product.

The goal of the expense program is to first determine the overall level of expense needs. Second, the program seeks to reasonably apportion the overall level of expenses among the individual insureds. The expense program is based on the position that expenses are sufficiently related to the costs of the insurance product, i.e. losses; and thus to the premium paid for the product so that proportionate allocation of expense costs to the insured on the basis of premium is equitable. This goal is distinct from attempting to determine expense needs separately, insured by insured, which would be an impossible task. Throughout the course of this discussion, however, it must be kept in mind that the expense allowances in rates are not to be considered as prescriptions for company operations. There are in excess of 700 companies providing workers' compensation insurance. The management of each of these companies follows its own direction in attempting to maximize its position in the market. Further, the base rates must allow for flexibility in operating and marketing strategies. The insurers must be able to vigorously compete for attractive risks, and see that most risks can find coverage in the voluntary market.

Workers' compensation policyholders vary in annual premium size from a low of $35 to a high of several hundred thousand dollars. The policyholders vary in scope from the employer of one employee at one location to the employer of thousands of employees located in all 50 of the United States. Obviously, a flat mark-up system by itself would not be sufficiently equitable to all employers regardless of size. Recognizing this, the National Council in 1943 introduced a program of expense graduation. Expense graduation is a recognition that as the size of the insured, measured in dollars of premium, increases, the expense needs, measured as a percentage of premium, decreases. Theoretically, one might produce a whole schedule of base rates which vary according to the size of the insureds. But such a scheme, remembering the vast range of sizes of insureds, and the refinement of the classification system, would require literally thousands of pages filled with manual or base rates. Instead, workers' compensation ratemakers developed a program which automatically provides for the downward adjustment of the expense provisions in the base rates by the use of a system of premium discounts, which is a program fairly unique in property and casualty insurance.

The premium discount program is mandatory, and in those states where the National Council is the rating organization, the discount applicable to that portion of the premium in excess of $1,000 must be provided to the insured. There are two schedules of discounts typically called stock discounts and non-stock discounts. This reflects the fact that it is most typically the non-participating stock company which elects to use the former, more steeply graded schedule and the mutual or non-stock company which typically elects the latter schedule. Each company is free to choose whichever schedule it prefers, but having made that choice in a particular state, it may not change schedules until at least one year has passed. It should also be noted that those companies electing the less steeply graded schedule of discounts are most typically the type of carrier which pays dividends to policyholders as a part of its internal methods of operation.

When the program of expense graduation was first introduced, two elements of the expense structure were identified, with the actual reductions by size of premium determined largely on the basis of judgment. In 1949, at the request of, and in close cooperation with N.A.I.C., the National Council undertook a study of expenses by size of risk. This study supported and confirmed the reasonableness of the established expense graduations by size, and is presently conducting a third study. The results of this study, we expect, will become available in the latter part of this year.

There were several fundamental conclusions drawn from the first two studies. For instance:

1. Expense provisions based upon percentage allowances, or on dollar amounts, only, could not be equitable nor practical. Furthermore, no element of the expense structure can be properly evaluated without consideration of all of the other elements.

2. The allowance for total acquisition costs is best established and graduated as a budgeting item. Each commission contract is individually negotiated between the carrier and agent and can have many variables including items such as whether there will be participating arrangements.

3. Claim adjustment expense does not vary significantly as a percentage of premium, but rather, tracks more closely with losses.

The premium discount program results in economies of scale being recognized through the discounts. Therefore, the actual expense dollars available as a percentage of premium are less than what is allowed in the base rate.

While premium discount works on the problem of equity as the size of insured increases above $1,000, it does not suffice by itself in addressing the high expense costs, as a percentage of premium, of the smallest size of insureds. This problem has been addressed by introducing a program of expense constants applicable to the smallest sizes of insureds. This program provides that an expense constant of $15 shall be **charged** if the annual premium is under $200, and $10 if the premium is between $200 and $500. These values were determined as one of the results of the 1965 study of expenses by size, and obviously may be out of date.

Each year, the National Council summarizes the workers' compensation expenses incurred as shown on the Insurance Expense Exhibit of each of the individual carriers. Based upon a history of such data, as well as their own experience and knowledge, a committee of senior company officials each year reviews the individual items in the expense allowance and makes adjustments as necessary.

Studies to date have found only one item of the expense structure, as a percentage of the base rate, which varies from state to state, namely, premium taxes and assessments. This is due in part to the fact that a large portion of the premium is generated by single employers having operations in more than one, and often many, states. Many expense costs simply cannot be segregated by state. Examples include the auditing of the home office records of an interstate risk, the reporting of statistics, company home office operations, and others.

Yet on occasion, the question arises as to when a significant increase in the level of losses has been identified in a state whether the level of expenses allowed for in rates should also be permitted to change proportionately. This is equivalent to asking if a manufacturer using a certain mark-up country-wide should be permitted to maintain that mark-up percentage in a particular state after he has identified that the cost of raw materials has increased in that state. It must be kept in mind that when actual loss costs have exceeded the expected losses, the carrier has provided more insurance product than the price had contemplated. This is analogous to the supplier of a product who delivers more product than the price contemplated. The supplier suffered the loss of the raw cost of the product, and he suffered the loss of the expense dollars needed to distribute the total amount of the product. It is not a question of moving from some allegedly correct expense level in the past to some other level.

The workers' compensation insurance industry finds itself in the incongruous position of, on the one hand, having some consumer advocates suggesting that when loss levels rise, the expense levels, and thus premiums, should be artificially constrained; and, on the other hand, having an ever more difficult time providing voluntary coverage for the small risk which has the greatest expense costs as a percentage of premium. We have at least one critic suggesting that expenses should only be allowed for on a dollar basis. That is, we should state what amount of expense dollars will be needed to provide workers' compensation coverage in 1980 in State "X". I would suggest this is like asking GM what its production costs will be in 1980 for Chevrolets or even asking Joe's Hamburger Stand what its raw chopped meat costs will be in 1980, when neither one of them knows now how many units of their product will be supplied in 1980.

The industry, however, is not simply suggesting the status quo. Rather, it suggests further improvement in the existing system and/or completely changing the system if a better system is devised. The new study of expenses by size is designed to check on the propriety of values in the current system, but also to provide data for the consideration of other systems.

MR. RICHARD G. WOLL: Property and Casualty expense assumptions in pricing are handled primarily in three different ways. Commercial Lines excluding Workers' Compensation are handled one way, Workers' Compensation is handled another, and Personal Lines are handled a third.

The way most Commercial Lines are handled is illustrated by my own experience as a Commercial Lines actuary wherein I would often be required to study our expense assumptions and determine whether expense considerations justified reducing rates. Such reductions could be obtained by judicious use of filed manual rates coupled with filed individual risk rating plans which gave the underwriter considerable freedom in his pricing. By contrast, in Personal Lines there is no freedom to vary the manual rate from one risk to another, and the underwriter proceeds to implement his judgment through acceptance or rejection of an individual risk. Thus, expense assumptions in these lines must be built into the manual rates.

Tony Grippa has talked to you about expense assumptions in Workers' Compensation and how they are explicitly taken into account in the pricing mechanism by use of premium discount plans, expense constants, and the like. It is worth noting that Workers' Compensation is the only area in Property and Casualty insurance where possible variations in expenses according to risk size are specifically taken into account.

This came about through a long evolutionary process wherein companies which obtained flexibility in Workers' Compensation pricing via dividend plans forced companies without this freedom to recognize competitive requirements by development of more and more sophisticated rating and pricing procedures. These competitive pressures came about when corporate clientele refused to give their business to anyone refusing to recognize that for them, percentage expense loadings were ridiculous when they were paying hundreds of times as much premium as other insureds.

In Personal Lines, expenses are still almost universally loaded as a percentage of premium. There is a slight difference in concept, by the way, in the manner in which expenses are loaded in Property and Casualty insurance as opposed to Life insurance. Life insurers start with what we call the loss cost or pure premium and then use a formula to load expenses. We think of ratemaking as a way of comparing the provision in the rates for loss costs with the actual loss experience - thus no explicit loading is usually made.

If we think in terms of the Life insurance formulas, we, in the Automobile Lines, load expenses according to the following formula:

$$\text{Premium} = \frac{\text{Loss Cost}}{1.00 - \frac{\text{Expense}}{\text{Premium}}}$$

This method does have the virtue of making sure that our expense provisions keep pace with our loss requirements and helps cope with inflation. This is in contrast to the life situation where a quoted lifetime rate must be sufficient to handle expenses which can be incurred many years after policy inception. The problem this poses is what occasioned Paul Bourdeau's comment about estimating expenses and then loading loss costs.

In Homeowners insurance, the methodology for handling expenses is similar to the above but has not resulted in major problems. Premium amounts are largely a function of the amount of firefighting protection available and the amount of insurance a person buys. A person paying larger premiums is likely to be purchasing larger amounts of insurance and is not particularly likely to be economically deprived.

Automobile premiums, however, are a function of place of residence multiplied by other classification factors which are, in themselves, a function of many other variables. This multiplicative effect is magnified by the percentage method of loading expenses since a person subject to high loss costs is also subject to proportionately high expense loadings. For instance, we have some people paying as little as $150 for a full package of insurance coverages while others can pay $3,000 or more. Since most companies charge and pay commissions on a flat percentage basis, the first driver typically will be paying 15% of $150, or $22.50 to the agent while the second policyholder would be paying 15% of $3,000, or $450. It is possible that the agents handling the higher premium policies do deserve more remuneration than those handling cheaper policies, but it does seem unlikely that they need this much more. While I picked the commission component of the premium as an example, the same point can be made with regard to company expenses. Some major insurance carriers are already charging rates which do reflect the belief that expenses should not be loaded through a uniform percentage basis.

The major assumption involved in loading expenses as a percentage of premiums is that marginal costs per policy are equal to average cost, that there are no costs per policy that are uniform for all policies. In other words, there are no economies of scale. Tony Grippa has already discussed how the Workers' Compensation pricing methodology is explicitly based on the belief that there are economies of scale with respect to premium size.

Another problem with our treatment of expenses and one that is specifically addressed in Life insurance, is the fact that no difference is made between expenses involved in writing new policies or renewing old ones. If it is cheaper to renew a policy than to write it for the first time, then we have another area where our expense assumptions in pricing do not reflect underlying realities.

Why has this situation come about? Why do we not use more realistic expense assumptions in our pricing methodology? One major reason for our problems is that the way we account for expenses is prescribed by law, the infamous Regulation 30 which describes at length how companies are to classify all their expenses. This law acts like a Procrustean bed which eliminates consideration of expense assumptions which do not fit into its mold and which causes companies to go to great lengths to figure out a pigeonhole in which to put every dollar of expense. You can imagine how many pigeonholes the president's salary fits into.

This approach may be great for public documents and accountants' salaries, but it fails to provide information about what would happen if one took one action or another, and we do indeed lack this information. I would say, in fact, that we have a prejudice against getting this information but that this prejudice is due, in part, to the difficulties encountered in attempting to get such information in the past.

The 1965 study of expenses by size of risk that was done for the Workers' Compensation lines was a major effort for the companies involved. I have heard some real horror stories about how much time, effort, and "judging" went into it. We are now attempting to update this study, but the new effort seems to be another crash project with no provision for continuity, and we still find that collecting this information is very expensive. In addition, Casualty actuaries have never evidenced much interest in the subject of expense assumptions in insurance pricing and would not be doing so now if we were not being subjected to external pressures.

Where have these pressures come from?

Commissioner Stone and his representatives have done quite a bit in this area in both summing up criticisms of our expense assumptions in Automobile pricing and in mandating substantive changes. I personally disagree with much of what he has done, but he certainly has done many important things, whether one agrees with them or not.

He has, for example, separated the consideration of expense requirements in ratemaking from loss requirements. We have always assumed that past relationships of expense and loss expenditures were appropriate for the future. He says that this assumption is invalid and that we are to determine future expense needs without regard to loss needs. He also claims that expense allowance in the rates should act as budgetary constraints on company expenditures and that past relationships are inappropriate if companies had failed to control their expenses in the past.

This last point deserves some attention. Mr. Stone originated the concept becoming known as "normative" ratemaking. This phrase should strike chills into the heart of anyone who is unable to analyze his company's true expense needs. Normative ratemaking is a term used by a regulator when he wants to put into a given rate whatever he wishes. He says, in effect, "Are you really competing, are you really keeping your costs down?" Put another way, the regulator runs a game where it is "heads I win, tails you lose."

In Mr. Stone's 1975 opinion he states that if our own cost increases are greater than those indicated by external indices, he will use the external indices on the basis that we have had insufficient control of our costs. If the converse is true, then he will use internal indices since any savings in expenses should be passed on to policyholders. This is a very noble philosophy, but our chances of collecting enough money in this situation are rather low.

Mr. Stone has also moved to impose automobile rates which assume that all company expenses are fixed. It is interesting to note that while he was willing to take this action with regard to the companies, he actually loaded higher percentage commissions on higher premium policies!

His formula would look as follows:

$$\frac{(\text{Loss Costs}) + ((\text{Loss Costs}) \times \text{Commission \%}) + \text{Company Expenses}}{1 - (\text{Profit \%}) - (\text{Tax \%})}$$

Now I believe, and I believe any actuary would believe, that individual risks in higher rated classifications generate larger loss costs. In other words, I am saying that I believe our ratemaking does the job we ask it to do, but Mr. Stone is saying that such risks should generate proportionately more commissions regardless of any flattening of company expenses.

Another source of pressure has been the Insurance Department of the State of California. There is an assigned risk filing which has been pending for a long while because Commissioner Kinder has refused to approve it until recognition was made in the filing that both company expenses and agents expenses were not totally variable - that there is a fixed element in both. Secondly, he has sent a bulletin out to all companies doing business in California stating that all companies will henceforth be expected to establish rates using procedures which did recognize fixed expenses with regard to a particular policy.

Our company has done a study of the effect of such rate filings and has discovered it to be remarkably minimal. Other industry figures have also researched the question and would be willing to modify current practices with regard to company expenses but feel unable to respond on behalf of agents without their involvement and cooperation. Agents' organizations have been vehemently opposed to any changes in present practice.

I have tried to present the major elements of our present assumptions and practice with regard to the expense elements in ratemaking. Stated briefly, we have generally loaded loss costs with expenses on a percentage basis. This practice has led to social pressures on our expense assumptions because of the large differences in rates and the feeling that people whose experience generates large premium rates should not have to pay similarly large amounts for agents' and company expense. Pressures are now being generated by various states to change our practices, spearheaded by California and Massachusetts.

MR. DAVID E. GOODING: Paul, you mentioned in nonpar pricing the importance of including an inflation allowance either explicitly or implicitly. How do you do it explicitly? Do you have a particular theory in mind?

MR. BOURDEAU: Basically, we subscribe to the theory which states that there is a basic 3% interest rate on short-term money plus the rate of perceived inflation. Therefore, if you have a perceived rate of inflation of 4%, your short-term interest rate will be 7%. For example, if we were using an 8% level interest rate assumption for a problem, we would simply inflate the renewal expense 5% each year. Some of our contribution to profit and overhead analysis is typically done with decreasing interest rates and there we make an arbitrary assumption that the noninflation of renewal expenses is consistent with decreasing interest rates. This is not as elegant as it might be but, basically, that is the way we proceed.

MR. TOM CABLE: Mr. Bourdeau, you mentioned that inflation should be consistent with the interest assumption. Do unit expenses inflate and does the allocation procedure affect the inflation assumptions? For example, if you put all your expenses on per policy basis, maybe you will have a greater inflationary effect than if you put half of them on a per thousand basis.

MR. BOURDEAU: I would have to agree with you, Tom; but basically, when we inflate expenses we are making an assumption that all the units are perfect and that we have, in reality, allocated per policy type expenses to per policy units, commission type expenses to commissions, and so on and so forth. It is true that one is tacitly making the assumption that these relationships hold in the future. We have not studied this particular problem in depth, and I must admit that over a period of time these relationships may change.

MR. LLOYD K. FRIEDMAN: The place where life actuaries and casualty actuaries meet is health and accident insurance. I would like to hear some opinions about expense assessment in that area.

MR. CUMMING: I gather that expenses in the property and casualty business are assessed on a percentage basis. I do not know how the casualty companies handle the pricing of their health insurance. I would suspect that they follow a similar percentage loading practice. The life companies, since they generally have life actuaries, tend to follow pricing patterns which are more typical of life insurance, at least we do. We take into account the constant element of expense, to the extent we can discern it, and the percentage element.

MR. WOLL: But you do not have the large element of futurity in group accident and health insurance, do you?

MR. CUMMING: No, that is different.

MR. LOUIS WEINSTEIN: I have a question for Mr. Bourdeau. At the beginning of your talk, you mentioned the historical use of but one set of assumptions in dealing with expenses. Is it not appropriate to use but one set of assumptions? If we use one set of assumptions for pricing and another for accounting might we find that over time our product pricing and our profit objectives start to digress?

MR. BOURDEAU: No. I would be very emphatic on that. I think there is absolutely nothing wrong in using several sets of assumptions. In fact, one should use different assumptions depending on the problem to be solved. In studying whether you want to continue with a certain line of business, sunk costs and similar concepts are perfectly appropriate. Marginal pricing with variable expenses also has its place.

It should be emphasized that a financial statement is primarily a codified set of information that is supposed to be consistent from one organization to another allowing financial analysts, as well as regulatory authorities, to make comparisons and analyses having an understanding of the data. Therefore, one must maintain certain standards in financials but these standards need not carry over to all economic studies. For example, in the accounting sense it is easy to determine what the book cost and the original cost is of an asset; however, in an economic analysis there is never a time when either one of these has any relevance. Typically, one almost feels like he has to defend the use of such concepts as marginal costs and sunk costs. There is a tremendous suspicion when other than accounting costs are used. Your question gives some credence to this. These concepts require us to know what we are doing. We can not use only variable costs and then kid ourselves into thinking that total costs were used. There is a certain discipline and control of intellect that goes along with using these concepts and that is where the ball is usually dropped. You just can not blithely use marginal cost concepts and think you have total cost.

MR. MICHAEL FUSCO: I would like to ask Dick Woll a question on Automobile Insurance. To the extent there are some fixed expenses for Automobile Insurance, we would then expect to see a lower expense ratio in high rated territories and, therefore, correspondingly higher expected loss ratios in those territories. Does The Hartford reflect this in their contingent commission arrangements with agents, say, in the Bronx versus Westchester County?

MR. WOLL: Actually, our going into analysis of this subject is impelled by events in California. The way we are handling it is to have an additive charge which represents that portion of Company expenses we think to be fixed. This methodology actually makes it fairly simple to continue present practices. If you analyze your results excluding your fixed charge, you are back in the old ball game of all percentages and, therefore, uniform permissible loss ratios, break even points, and so on. Until Company documents are changed, there is no way we can ever get any expense treatment reflected meaningfully in our Company documents. We do not generally reflect any differences between individual risks in our bonus plan.

MR. SANFORD R. SQUIRES: In Property-Casualty Insurance one of the major reasons why, in the past, expenses were loaded on a percentage basis was due to the information available. We had only premium dollars and loss dollars from accounting sources. In the future, loading expenses on any other basis will make a big demand on the data and information available. Mr. Woll, would you comment on the increased need for data; the effect on Bureau ratemaking because of the need for data; and the effect on regulatory approvals because of two sets of data not just one.

MR. WOLL: First of all, we went with the percentage assumption for expense loadings with no more knowledge than we have now. If we wish to adopt a flat expense assumption, I do not believe that improvements in data are required. We can adopt either approach without anything more than intuitive justification. I might add, by the way, that when percentage loadings were originally adopted the spread on rates was not enough for anybody to be bothered by it. It is the old idea that we can leave the small errors alone; the "deminimus" principle as I call it. When it was originally set up, somebody may have said, "Well we know we are making this assumption about total variable costs, but there is so little difference in actual results that it is just simpler and easier to do it this way. We do not have to worry about it." Like a lot of deminimus principles, however, the assumption that makes the deminimus approach possible ceases to be true over a long period of time; and then it becomes a monster.

It is much better for political and social equity reasons to go to the fixed expense assumption and intuitively, I think that most of us would feel far more comfortable with it.

As far as the data problem is concerned, I would like to answer the regulatory question first. It is worth pointing out that it is the regulators that have first moved in the area of requiring fixed expenses; two regulators to be exact. Within a year we will have 50 regulators. The question of whether regulators will approve the concept is not particularly meaningful. We may need approval on this concept, regulatory approval, for a specific set of rates; but we may not have the luxury of saying we do not wish to adopt rates using fixed expense assumptions because of the problems we will have with them. Because we are going to be doing it, in all probability, whether we can cope with the problems or not.

Secondly, as long as we segregate, for ratemaking purposes, what we have loaded for fixed and variable expenses, we can continue to work under a fixed loss ratio by excluding the fixed expenses. We could also determine rates by determining the dollars of premiums needed to cover losses like the people do, and then, start comparing losses to those premiums. You still have a loss ratio method and obviously you may still want to do some expense analysis, but you can just take the expenses and load them on an appropriate statewide average basis after that. Actually, there are more problems involved in changing expense assumptions than those you mentioned. There will probably be a movement of expense dollars from several segments of society to others including some states. These are important consequences, but it should be remembered that the Company expense element that is fixed is very small. We keep so little of the premium after we pay losses and commissions that changing expense assumptions will not really amount to anything important until the commission element is taken care of.

MR. BRIAN R. LAU: I would like to address this question to Mr. Bourdeau. You stated that marginal pricing was to essentially up the presumed profit level and then let overhead expenses work out in the aggregate. It seems to me this is merely allocating overhead expenses proportionate to the profit objectives built into each product. This is in direct conflict with your statement that we should try to price each piece individually.

MR. BOURDEAU: Well, you have to start out with the assumption that the general objective of a business is to maximize its contribution to profit and overhead. If the overhead is large the profit is small; on the other hand if the overhead is small the profit is large. Therefore, if you price with the idea of maximizing this contribution to profit and overhead, and separately control the overhead, it has to work out well profit-wise. It is difficult to determine what is gained by all this pigeonholing of expenses that Mr. Woll mentioned earlier. What is to be gained by putting the president's salary in many pigeonholes? Stated very simply you must pay the president's salary out of total revenues and what you have left is profit. This illustrates the general concept which, of course, has a lot of sophisticated corners which require further understanding.

MR. LAU: Then are you really ignoring how much each individual product is contributing to overhead?

MR. BOURDEAU: You do not know or care what each product is contributing to overhead as long as the product is making an adequate combined contribution to profit and overhead. Currently, many term insurance plans have a negative profit when total expenses including overhead are applied. In pricing, a pivotal number is the break even or variable cost of a product. For example, if the variable cost of a product is one dollar and you sell it for $1.01 you are one cent better off providing you did not displace the sale of another product.

MR. LAU: But in today's market that seems to be a real danger.

MR. BOURDEAU: Well, it goes back to this intellectual discipline or whatever you want to call it. These problems you mention are real and they have to be addressed intelligently but I do not think it disqualifies the method.

MR. ROBERT J. HUNTER: I want to comment on the Massachusetts decision as it relates to this problem. First of all, I was interested in the fact that the insurers in Massachusetts admitted there was some error here in terms of the using of full percentage and I wondered what they were doing to export that admission to other states in terms of fixing that problem. I agree that the agent's commission question is a very important one; but I think, Dick, you slightly misrepresented Jim Stone's position. He did put the agents on notice that this is the last year he is going to allow percentage loading for commissions. He has had a series of meetings with them already. I can tell that he has publicly stated and privately states that he will make them fix it next year. I hope that your company and others are adjusting your agency relationships accordingly.

MR. WOLL: We certainly are.

MR. HUNTER: As you move away from the percentage loading, how will you handle things as agents' relationships and transferring this concept to other states? How does ISO, for example, fit into a pattern where perhaps individual company expenses take on more magnitude? Do they become a wholesale rate manufacturer?

MR. WOLL: I understand that Commissioner Stone did say in his decision that he would be moving to fixed commissions. I am glad to hear that he intends to do that because we were quite surprised at his actions last year; and, in fact, our agency contract had already been adjusted in anticipation of the step that was not taken. Therefore, we are all set for next year. As far as exporting the concept into other states, the dilemma that we have had as an industry all along has been the fact that company expenses are such a small portion of the total. I looked at our California premiums after we did our study on a rate comparison basis with other companies' premium charges on a package basis and could not even see the effect of the company change with regard to expenses. It looked like a normal premium comparison. We were still high. As far as ISO's reaction to this, we have an expert right next to Bob Hunter who I will ask to comment on this last part of his question; Mike Walters.

MR. MICHAEL A. WALTERS: There is quite a controversy about exemption from the Sherman Anti-Trust Act. McCarran Ferguson may give Rating Bureaus the ability to set prices in concert with overall rates, but the subject of commissions is quite a concern to our lawyers. Can companies agree in ISO Committees to change commissions? Of course not. Companies can reallocate their own company expenses if they choose, making it a little more equitable, but dealing with commissions is an extremely difficult problem to resolve. Regulators have some ability to do this in Massachusetts where they set the rates, but in California there was a comment or a letter by Commissioner Kinder dealing with his authority which said, "When I examine companies, I will be looking for things such as more equitable expense treatment."

MR. WOLL: There has been some concern by some people as to whether the Rating Bureau can handle this issue. I am not saying that ISO is proposing any changes or anything else; but I do know that there has been some study on how or if this can be done, and I guess what I would like from you is your feeling as to whether, in itself, the flattening of expenses in Personal Auto would place an unbearable burden on a Rating Organization.

MR. WALTERS: I do not believe so. We have in several jurisdictions, for instance, Illinois, gone to the so-called pure premium approach. ISO can continue to analyze the loss experience and, in effect, put out advisory or informational loss costs. It does burden small companies who do not have actuarial staffs and it probably put a burden on consulting actuarial firms to gear up to advise them, but it should not put a burden on ISO.

MR. WOLL: By the way, it is worth pointing out one reason the percentage loading survived as long as it did. It is a lot simpler and a lot less work and we probably spend more time and more money providing better equity while making our product less efficient.

MR. SAMUEL L. TUCKER: I would like to ask a question about Automobile Insurance. I have read in the newspaper of a very serious blow to agents and insureds in New Jersey. A company was leaving the State and disposing of all its coverage and its agents, etc. It seemed to me as though they are casting about for some method of counteracting this. It seems a very serious matter from my limited knowledge. Is there any way that this company could absorb the rates demanded in New Jersey, which are too low and do not give the companies sufficient room for expenses, and spread that cost among other states recognizing that there is some social requirement to provide the coverage?

MR. WOLL: I believe Fred Kilbourne had the right word this morning. It is called embezzlement. There is no reason why a private organization should go into the taxing business and spread costs from New Jersey policyholders paying inadequate rates to policyholders of other states. This is the business of the Government and the Government should handle it.