# RECORD OF SOCIETY OF ACTUARIES 1975 VOL. 1 NO. 1

# IMPACT OF INFLATION ON LIFE INSURANCE COMPANIES

- 1. New variables and uncertainties determining future
  - a. Reserve and surplus levels.
  - b. Operating expenses and net gains.
- 2. New financial and administrative procedures motivated by its presence.
- Development of contingency plans.
- 4. Can long-term benefits continue to be soundly written with continued high inflation?

CHAIRMAN MENO T. LAKE: We cannot pick up our morning paper without reading headlines about the effect of inflation on our economy and our way of life. Some of us are apt to say that a recession does not really hurt the life insurance business - people even turn more strongly to our products during such times. But let us not kid ourselves for a moment that the current recession, coupled with near double-digit inflation, is not hurting our business. Inflation's impact is devastating in the problems it's currently creating in our industry.

For those of you who have not seen it, I strongly recommend you read the Trend Analysis Program - or TAP - report of September '74, put out by our Institute of Life Insurance. This report analyzes three different possible scenarios for future inflation and their possible effect on every aspect of our business including:

- 1. Our products and their marketing
- 2. Our distribution and agents' compensation systems
- 3. Our investments
- 4. All aspects of the administration of our business

There seems little doubt that continued high rates of inflation pose rather horrendous problems for our industry. It erodes the cash and pension benefits we pay and, at a time when ever larger benefits are called for, it erodes our clients' ability to pay, through the indexing of both the Social Security benefits and the wage base on which they are taxed.

But the TAP study also shows some rays of light. It points up the need for us to critically evaluate our products and step up our innovations designed to meet the constantly-growing need for life insurance in an inflationary economy. We've got to develop a new way of looking at most things we do - our products, our investments, our "constant dollar" earnings, our methods of compensating both Home Office and Field personnel. So much for the TAP report on inflation and the conclusions it reaches. How about this morning's panel on inflation and what our panelists feel should be done about it? I know we could spend at least a week on this subject and we've only got an hour and three-quarters. But I am confident that we can cover a lot of ground in that time and reach our real goal - which is to get each of you thinking about the effects of inflation on your business and what steps you can take to best offset these effects.

MR. ALAN RICHARDS: My part in this program is to attempt to give you some broad general background concerning the economics of inflation. I am obviously not a professional economist and it is with considerable trepidation that I dare speak on this subject so soon after Dr. Friedman's address to you this morning.

But I feel it would be improper for us to discuss this subject without some analysis of the mechanism by which we got to our present state and what might be the probable course of events in the future.

Actually, I believe that actuaries are well fitted by training and disposition to interest themselves in fundamental economic theory and to draw their own conclusions. While I have a high regard for professionalism in almost any field, nevertheless, well informed amateurs are not to be despised. This is particularly true of a discipline such as economics in which the record of professionals has been - to put it rather delicately - not terribly reassuring.

After all, economics is, or rather should be, the study of history. And, in a modern industrial civilization, that means a strong emphasis on the history of money and credit. Concerned as they are with long-term financial transactions, actuaries know as well as any the truth of the oft-repeated words of Santayana, "Those who do not learn from history are doomed to repeat it."

Perhaps I can stimulate your thinking to the point where you will at least go back to your company and talk to your economic consultants, or your investment vice president, or the trustees of the pension fund you are consulting for, or whoever you regard as being well informed on economic matters, and ask them some awkward questions. I will guarantee that after a few such conversations you will come away with a much healthier regard for your own judgment in economic and monetary matters and a feeling that perhaps you have as much basic understanding of the subject as the experts do. Perhaps more.

Now for inflation.

First, I think it is important to recognize that our present inflation was not caused by the Vietnam War. It was not caused by excessive government spending -- at least not directly -- and, above all, it was not caused by the oil price cartel set up by the Organization of Petroleum Exporting Countries. Neither is it caused by excessive wage demands by unions nor excessive price increases by manufacturers. You have to look deeper.

The basic cause of inflation is an idea. It is the idea which recurs at frequent intervals in history that merely by manipulating the supply of money, wealth can be created where none existed before. It happened during the Roman Empire, it happened in France in the 18th century. It happened in this country in the 19th century - it happened in Germany in the early 1920's, and it's happening now. In recent years the idea has taken on a new semirespectable form in the teachings of John Maynard Keynes, but it is not a new idea.

The thing that distinguishes the present inflation from most other historic inflations is that it is built upon an enormous foundation of debt, much of it long-term, rather than in a mere increase in the amount of currency in circulation. Now, there is nothing wrong with debt, but to be manageable it must not rise at a rate greater than the increasing productivity of the economy can service and ultimately repay.

Unfortunately, in this country in the last ten to fifteen years debt has been growing at a rate two or three times the rate of increase in the national income. After this process continues for a while it becomes self-generating in that the servicing of the debt requires the creation of additional debt at ever-increasing interest rates, and a growing feeling that we do not dare to stop this process of excessive debt creation or even to slow it down for fear of disastrous consequences.

Periodically, as inflation worsens, the government attempts to slow the growth in the money supply, only to hastily reverse itself when cracks begin to appear in the financial and industrial structure, and the floodgates of debt creation are opened again. In a year or two, the whole process repeats itself again as this fiat money works itself into the system but with higher interest rates and accelerated inflation.

Now with debt generally increasing at two or three times the rate that the real value of goods and services is increasing, it must be obvious to anyone with a second grade education, let alone an understanding of actuarial science, that this process must ultimately come to an end. It may take many years but sooner or later the excessive debt created must be liquidated. Now this can happen in one of two ways and there is considerable controversy even among non-Keynesian economists as to which way we are headed.

On the one hand, the debt can be liquidated through run-away inflation whereby the value of the dollar is reduced to zero and thereby all debts are automatically reduced to zero. This happened in Germany in the 1920's. Or, on the other hand, particularly in an economy with a great deal of long-term debt such as we have here in the United States, by failure of the weaker debtors. Some economists have likened the debt structure to an enormous inverted pyramid with the U.S. Government and the strongest debtors at the inverted apex of the pyramid and the weakest debtors at the top of the pyramid. There is some feeling that, with the sides of the pyramid growing exponentially, ultimately the structure must fall of its own weight as the weaker borrowers at the top fail and in turn cause a progressive weakening of the structure beneath them, resulting in a rapid and accelerating automatic contraction of the pyramid of debt. It's painful, it hurts while it lasts, but ultimately the swollen pyramid of credit is reduced to manageable proportions and sets the scene for another big expansion which may last for decades. We may be entering this deflationary phase of the cycle.

On the other hand, the government may be successful in inflating the money supply to the point at which we have hyperinflation without the inter-vening involuntary debt liquidation.

Needless to say, run-away inflation is a far worse cure for a credit imbalance than deflation. In run-away inflation, almost all values are destroyed. I might add that there is some doubt as to whether run-away inflation is possible in the United States without a massive liquidation of long-term debt first taking place. The theory is that, if the inflation rate, and hence interest rates, go to unsustainable levels, the banks, which have maximum rates on much of their loan portfolios, would be unable to meet their obligations. Automatically, you would have a deflationary situation. This alternative scenario, which could last for many many years, would therefore be a high rate of inflation followed by substantial deflation followed in turn by run-away inflation. Let's hope we never have to test the theory.

Now all of this has a very important bearing on the investment policy of institutions such as life insurance companies. Obviously, the greatest emphasis should be on quality of investments. High-quality debt should be preferred to equities (with one exception which I shall mention in a moment). In a deflationary environment, the poorer credits will be the first to default. When the deflationary cycle starts in earnest, interest rates will come down and long-term bonds will appreciate. But only if the company which issued the bonds is still in existence to pay off.

At the present stage of the cycle, there is also a great deal to be said for putting a significant proportion of the assets in short-term, highquality debt instruments. Rates are still high and the liquidity this affords will be very useful when the time comes to buy equities again, as it will. But again, one should buy only the highest-quality shortterm paper and, above all, avoid bank certificates of deposit and commercial paper. One unknown factor in the case of life insurance companies is the enormous amount of direct placements which have been made since the end of World War II. It is possible that we are going to find out quite soon just how sound those investments were, without the discipline of the market place.

Finally, the exception. If you really believe that we are headed for massive deflation or massive inflation, a moderate investment in goldrelated equities could turn out to be an excellent hedge. Many people believe that the absence of gold from the world monetary system along with the discipline that it imposes has accentuated our problems in recent years. We may well be forced to return to it.

Let me depart from a general discussion of inflation for a few moments to talk about a specific way in which I think the attitude of the public in inflationary times towards life insurance, and particularly permanent life insurance, can be improved. That is the way in which we calculate cash values. We have always used the "prospective" method whereby the cash value is a function of the present value of future benefits less the present value of future adjusted premiums. This has some unfortunate conse-

#### quences from a sales and public relations standpoint.

The statutes must specify a maximum interest rate in order to set minimum cash values. In a period of high interest rates, such as we are going through now, life companies are continually on the defensive trying to explain why a lower rate of interest produces a higher cash value than a higher rate of interest. I submit that this is virtually impossible to explain to the public, or even to the sales force, and puts life insurance companies at a serious competitive disadvantage as compared with other savings media. "Everyone knows" life companies only pay 3%.

Now, as actuaries we know that the real rate of interest, used in nonparticipating premium rates at least, is considerably higher than the interest rate whown on the cash value page of the policy we give the customer.

I believe it might be rewarding to explore the consequences of changing our approach. Suppose we were to use a "retrospective" accumulation method whereby gross premiums are accumulated at a minimum rate of interest specified in the law rather than a maximum rate. Specific expense allowances would be deducted and specific mortality charges would be deducted each year. We are used to thinking of prospective and retrospective methods as producing the same answer. Under the system I am suggesting, this would only be true when the same interest rate is used and when the gross premium less expense allowances is equal to the adjusted premium under the prospective method. The resulting pattern of cash values may or may not be quite different than that which we are used to, but I believe that public understanding and confidence would be enormously advanced. There are, of course, some disadvantages. For example, the expense factor would be out in the open where everybody could see it, but perhaps we are tending in the direction of that kind of full disclosure in any event.

After that digression, let me leave you with a closing thought - the economic theories of John Maynard Keynes should, I think, take much of the blame for the circumstances in which we find ourselves. However, I think there is some evidence in his writings that he would have been horrified by the present turn of events. In support of this, let me leave you with the following quotation attributed to him: "There is no less conspicuous yet simultaneously sure way of destroying the present foundations of society than through the corruption of the currency. This frees the hidden forces of economics, which not one in a million can diagnose, in a destructive way."

MR. GARY CORBETT: If you want to match my discussion with one of the four topics listed in the program, it corresponds most nearly to the first. However, as Meno has said and Alan has illustrated, we are not covering the program topics exactly as listed. My discussion centers around the Impact of Inflation on Life Insurance Companies' Financial Statements, both statutory and GAAP.

It would be impossible in the time we have available to study all of the possible impacts of inflation on life company statements. Rather, I have chosen to tackle a few items in some depth - those I hope I know something about because of my past involvement in financial reporting and my present concerns with valuation.

I shall be discussing higher-than-expected acquisition expenses; higherthan-expected, but level, annual expenses; increasing annual expenses; the effect of high interest rates - which I consider to be a part of the inflation scenario - on liabilities and on assets; and, finally, financial reporting in units of general purchasing power.

## ACQUISITION EXPENSES

First, let's look at the impact of inflation on acquisition expenses. I am assuming that inflation has caused the unit expenses of producing new business to become greater than those used for calculating the gross premiums in your current rate manual.

The effect of increased expenses on the statutory statement is very direct - a dollar-for-dollar decrease in net income for the year.

On GAAP statements there would be a similar direct impact on net income if the deferred expense asset calculations were based on the original rate manual assumptions. However, the Audit Guide requires that actual acquisition expenses, to the extent they are recoverable, be used in place of expected acquisition expenses in the deferred expense calculations. The theory underlying this apparent violation of the lock-in principle is that a company intrinsically revises its gross premium assumptions when it acquires new business at a cost greater than originally built into the premiums. Increasing the expense assumption means that the company must be anticipating greater income from other assumptions, such as interest, or else is accepting a decrease in expected profit.

If the original total net benefit and expense premiums, on assumptions that contained full provision for adverse deviations, were less than the gross, it is a relatively simple matter to provide for the increased level of expense. In some cases, a simple factoring up of the deferred expense asset factors would do the job. However, once expenses reach the level that the resulting total net premium exceeds the gross, the work gets more difficult. Assumptions must now be weakened, either because experience would justify more optimistic assumptions - for example, interest - or because, in accord with the Audit Guide and the Academy Committee's Recommendation \$1, the provisions for adverse deviations - the deltas - are lessened to the point where the net premium equals the gross. It is only when the net premium on "most likely" or "best estimate" assumptions exceeds the gross that you should charge sufficient of the actual acquisition expenses directly to net income to bring the net premium down to the gross.

### ANNUAL EXPENSES

When we turn our attention to annual, as opposed to acquisition, expenses, it is useful to distinguish the situation where unit expenses are now higher than were assumed in the gross premium calculations, but are expected to remain at these levels, from the situation where unit expenses, regardless of their level, are expected to increase in the future.

On statutory statements, neither the level of annual expenses nor increases in such expenses are provided for. I shall return to this problem after I have reviewed the impact of the two situations on GAAP statements. Higher-than-expected, but level, unit annual expenses do not require that reserves be set up. However, such increased expenses do require that an increased portion of future gross premiums be earmarked for annual expense. Since experience different from that assumed is supposed to be reflected in the statements in the year the deviation occurs, there is generally no need to go back and recalculate the reserve factors set up when the policies were issued. However, a large enough increase in annual expenses, possibly combined with adverse experience in another assumption, such as mortality or withdrawals, could trigger what the Audit Guide calls "Loss Recognition." If it is indicated on the basis of "revised assumptions based on actual and anticipated experience," (in the words of the Guide) that the existing GAAP reserve (the net of the Benefit Reserve and the Deferred Acquisition Expense Asset) plus the present value of future gross premiums is less than the present value of anticipated future benefit payments and expenses, a deficiency reserve must be established for the amount of this difference.

Next, let's turn our attention to the impact on GAAP statements of anticipated inflation in annual expenses. The Audit Guide requires that "all renewal expense assumptions should take into account the possible effect of inflation on these expenses." Later, the Guide is somewhat more specific when it states "Any anticipated effect of economic conditions on the interest assumption should be similarly considered for expense assumptions." Although the correlation between interest rates and the rate of inflation is far from perfect - particularly for periods as short as a year - sufficient correlation does exist to support the practice of assuming that interest rate assumptions in excess of 3Z-4Z implicitly assume a continuation of inflation with the rate of inflation being somewhat related to the excess of the interest rate over the "pure interest" floor. In my own company, we assume that our unit annual expenses will increase each year by the difference between the interest assumption for that year and 3127. This results in a reserve for renewal expenses of \$1 million, rather small when compared to our Benefit Reserves of \$55 million, but still a substantial amount that should probably not be ignored.

Admittedly, lower interest assumptions would result in a lower renewal expense reserve. And the use of statutory interest assumptions, at least on our formula, would result in no expense reserve. If the net effect of using a very low interest rate and a zero inflation rate assumption is to increase benefit reserves by more than the amount of the expense reserve that would result from more realistic assumptions, the use of such a low interest rate is conservative. But this is not always so. The effect of assuming higher interest rates and inflation for most term plans is to <u>increase</u> the total reserve. When you also consider that the statutory reserve contains no provision for even the current level of renewal expense and that it ignores the effect of select-period mortality, you reach the conclusion that many companies' statutory reserves for term insurance are inadequate. The reserves don't even make sufficient provision for expected experience, let alone for any adverse deviations in this experience.

#### HIGH INTEREST

Leaving the subject of expenses, let's look at the impact of the high interest rates that usually accompany inflation.

We'll first look at the liability side of statements. So far as the statutory liabilities are concerned, the basic problem is the gap that exists between current interest rates and those permitted for reserve calculations. This gap exists even if one projects a fairly rapid decrease in future new-money rates. It is particularly painful when you issue, as we did, a 5-year Single Premium Deferred Annuity which guaranteed 8% for the 5-year period. We invested the funds at about 10% and had to value at 3<sup>1</sup>%. This resulted in a surplus strain of \$30 for every \$100 of premium. There is no way that we will net less than 8% on the investments over the 5 years, regardless of how low yields are when we reinvest the interest. Admittedly, this is an extreme example, but, on any block of policies, where substantial reserves have been accumulated and there is reasonable matching of the assets with the liabilities, even the most conservative outlook with respect to future new-money rates would justify higher reserve interest rates than 4%, at least for funds on hand at the current time. I have already commented on the fallacy of assuming that low interest assumptions necessarily compensate for the ignoring of renewal expenses and a steeper mortality slope.

To any of you who share my concern in this area, I would suggest attending Concurrent Session E "Life Insurance Assets, Liabilities and Their Differences" this afternoon. The activities of the relatively new NAIC (C3) Life Technical Subcommittee on Valuation and Nonforfeiture Regulation will be described in this Session. The basic problem is that times have changed but the valuation laws have not - and they must. But that's another subject and another panel.

Let's now turn to the effect of high interest rates on the liability side of GAAP statements. Since the starting point for the reserve interest assumption is today's interest rates, we don't see the same gap between current and reserve interest rates. For example, on the 5-year Single Premium Deferred Annuity I mentioned earlier we can use approximately an 8% rate and then provide directly for the possibility of adverse occurrences - which in this case is the possibility that interest rates increase drastically, causing surrender of the policies and a resulting capital loss as we are forced to sell the covering investments.

Of course for annual premium business we cannot use a level 8% assumption but it is becoming more and more common to use quite high rates for the early policy years grading down to provide for greater adverse deviations as we move further into the uncertainties of the future. A common reaction to starting with a rate like 7%-8% is that it is not conservative but, actually, provided it's graded off fairly rapidly, the higher the interest rate in the early years when the asset share is negative, the higher the resulting reserves. Another impact of today's higher interest rates on the GAAP reserve assumptions is that we see more and more companies grading to an ultimate rate around 5%, whereas 3% used to be more common. You would have to say that the 5% assumption is largely based on the expectation of continued inflation with its accompanying impact on interest rates.

One qualification that must be made with respect to the above rates is the effect of policy loans. The 72-82 rates referred to above would be for outside investments and would have to be combined with the lower rate on the projected policy loans to produce the final interest assumption.

When we turn our attention from liabilities to assets, the principal impact of high interest rates is on the market value of fixed-dollar investments. There is probably also an effect on equities but we shall concentrate on bonds because they form the greatest segment of the portfolio and because the impact of inflation and high interest rates on them is more predictable than on equities.

Because of the closer relationship between reserve interest assumptions and earned interest on the GAAP than on the statutory statements. I think it's better to change the order I have used up to now and look at the impact on the GAAP statements first and then move on to statutory.

The Audit Guide permits a wide variation in the treatment of investments, both on the balance sheet and on the income and surplus statements. However, most companies follow the statutory approach of holding bonds at amortized cost and running realized capital gains and losses through the surplus account.

Under the statutory approach, if all bonds were held to maturity, no gains or losses would be reflected in the statements and there would be no problem. Each bond would yield exactly what it was purchased to yield - and it is this yield-to-maturity at the time of purchase that forms the startingpoint from which the reserve interest assumption is derived.

But, what happens when a bond is sold prior to maturity at a time when market yields are different than at the time of purchase? For example, assume we issued a \$1000 15-year Single Premium Annuity 5 years ago in 1970. We were able to invest the \$1000 premium in a 15-year 5% bond maturing in 1985. We thus used basically a 5% interest assumption for our GAAP annuity reserves. Now, in 1975, we decide to sell the bond in a 7% market for its \$858 market value and replace it with a 10-year 7% bond with the same 1985 maturity date. The ultimate effect on surplus will be exactly the same as if we had held the original bond to maturity but we are required to put the \$142 capital loss through our books this year and then show increased investment income over the next 10 years. For the 15-year period the result is to show \$142 more income than we should - since the capital loss does not go through the income account. If we were to run the \$142 loss through income, we would show the correct total investment income over the 15-year period but the incidence would be distorted with a large loss in the 5th year and excess profits in the 6th through the 15th. The only solution to this problem is to spread into the income statement realized capital gains and losses over the remaining term of the original investment. If this spreading is done at the yield rate in effect at the time of sale of the original investment, you get the same result as if the original bond had been held to maturity.

The subject of accounting for capital gains and losses in all industries is under current study by the Financial Accounting Standards Board. I just hope that the needs of the life insurance industry, with its unique requirement to match recorded investment income with reserve interest assumptions, is given appropriate weight in this study. However, I'm not too hopeful. The FASB, and the APB before it, have shown little indication that they pay as much attention to financial institutions as they do to the corner grocery store in setting Accounting Principles. Before leaving this capital gain and loss problem, let us refer briefly to the statutory statement. In one respect, the entire problem is less significant than for GAAP because there is not the same attempt at matching investment income and reserve interest requirements. That is, perhaps, just as well because the analysis of the effect of the type of transaction we discussed - the sale of the 5% bond in a 7% market - is complicated by the existence of the Mandatory Securities Valuation Reserve (MSVR). Looking at the Profit and Loss alone, we note the same effect on statutory as on GAAP an overstatement of investment earnings of \$142 over the 15-year period.

If we look at the effect on earned surplus, we would note only a very small spreading of the fifth year loss by means of the MSVR - and this spreading would be against all fifteen years - rather than just against the last ten. The MSVR is basically not structured to spread the effect of capital gains and losses caused by overall yield changes in the market. Rather, its intent is to spread capital gains and losses related to individual securities. For example, there is no reserve built up for U. S. Government bonds, whose market values are just as susceptible to yield changes as are any other bonds. Therefore, I do not believe the situation for statutory to be better than for GAAP in this complex and important area of capital gains and losses. I do hope that much more attention will be paid to this problem by actuaries and accountants in the future.

Just one last comment on the possible impact of interest rates - this time very high rates. Although the Audit Guide permits the changing of assumptions after issue only in the Loss Recognition situation, it is probable that, if portfolio interest rates rose to the level of, say, 20%, reserve assumptions should be revised. If they were not revised, the GAAP statements would cease to have any meaning. On statutory statements, reserves could be weakened with the approval of the State Insurance Departments.

# FINANCIAL REPORTING IN UNITS OF GENERAL PURCHASING POWER

A month or so ago, when I wrote a preliminary outline for these remarks, I was planning to spend a significant portion of my total time on the subject of Financial Reporting in Units of General Purchasing Power. There could not be a more appropriate subject for this session since the intent of such financial reporting is to show the impact of changes in the general purchasing power of the dollar, which is inflation, on a company. Also, it is a particularly timely subject because the FASB has recently published an Exposure Draft proposing that all companies prepare supplemental financial statements in which all amounts would be expressed in units of general purchasing power. The deadline for comments on this Draft is September 30th.

However, for a number of reasons, I am not going to take any time in the formal part of this session to discuss this subject. First, I have already used up my allotted time. Second, the subject just does not lend itself well to an oral presentation. You really have to look at some statement examples. And, third, I,could find no life insurance companies who, up to this time, have done any real work on the problem.

If you are interested we could discuss at least some of the <u>principles</u> underlying General Purchasing Power financial statements in the Question and Answer portion of the panel but I should warn you that I am far from an expert on this subject.

MR. ROBERT N. HOUSER: As an individual, I tend to be very much an optimist. I'm basically not a worrier. However, in considering the subject which our panel is dealing with today, one cannot help but be concerned. Our industry has a proven track record of coming through recessions, even severe ones such as the present, in excellent shape. We have not, however, been tested over a long period of persistent, high inflation rates.

I'm not aware of anyone whose crystal ball is clear enough to predict the future. Mine certainly isn't. Nevertheless, in view of the inflationary pressures which exist in our society, we cannot completely discount the possibility that high inflation rates, with perhaps some peaks and valleys, will be with us for a long time. In view of this and the long-range nature of our business, it seems to me essential that we face up to the potential problems posed by continuing high inflation. My purpose on the panel is to point out some of these problem areas.

In doing a little background work for this discussion, I searched through the actuarial journals for papers or discussions on the inflation problem. My overall conclusion was that the matter of inflation has received surprisingly little attention from actuaries, at least in terms of presentations at actuarial meetings. Perhaps the most interesting item which turned up in my search was an informal discussion on inflation held at the June, 1933 meeting of the American Institute of Actuaries (RAIA, XXII). This discussion centered on inflation problems and what life insurance companies can do to meet them. Although the participants didn't seem to come up with many helpful answers for today, I was impressed by the fact that the discussion received the high level attention of five former presidents of either the American Institute of Actuaries or Actuarial Society of America.

For purposes of the following discussion I have adopted a scenario of longterm, high inflation rates. The problems posed by such inflation would obviously be many and varied. For convenience, I have summarized under eight different headings the major problems that I see for our industry with this scenario. Although, in a few cases, I've suggested steps a company might take to meet the problem, by and large, I've found it easier to identify potential problems than to come up with answers.

1. <u>Personnel</u>. The problems our industry would face in this area would also be common to other industries. Demand for cost-of-living salary increases would likely put a severe squeeze on the principle of merit raises, resulting in growing dissatisfaction among those employees most essential to the company's operations. The push for more and better fringe benefits, including cost-of-living adjustments to the company pension plan, would put a heavy strain on personnel costs at a time when companies would be seeking ways to trim expenses. Cutbacks in personnel would likely be necessary to keep budgets from going through the roof. The result would almost certainly be a period of growing employee unrest and dissatisfaction.

2. Unit Costs. Unit costs in our industry have historically gone down over the years despite growing inflationary pressures. This obviously is because the rapid rise in volume of insurance coupled with widespread use of EDP facilities has more than offset the rise in administrative and sales expenses. With continuing high inflation this downward trend in unit costs would likely be reversed. As a matter of fact, we have already seen a slight upward trend in unit costs for our company over the last two years despite some of the best sales years in our history. This upward trend in unit costs seems likely to accelerate with continuing high inflation. Under these conditions management is obviously faced with the need for tight budgetary controls and effective work management programs. Every effort must be made to increase productivity such as by better use of EDP capabilities. Attempts to keep costs in line will likely focus on such areas as (a) unnecessary overtime, (b) the offset between underwriting costs and resultant savings in mortality and morbidity, (c) nonessential policyholder service, and (d) expenditures for such miscellaneous items as business travel, meeting attendance, advertising, etc. Because field costs are a large item in most company's budgets, they will come under very close scrutiny. Consideration must also be given to stripping from new policy contracts any features which are peripheral to the contract but potentially expensive to administer. Although higher investment earnings are likely during a period of high inflation, they are unlikely to be large enough to offset rising unit costs, particularly if there is a shift to term insurance or other lower.premium forms of coverage.

3. <u>Policyholders' Service</u>. It seems to me inevitable that rising unit costs would force a reexamination of service activities. The trimming of nonessential services poses no problems. However, companies may well be forced to cut service below formerly acceptable levels and even to institute charges for specific services previously performed free.

4. <u>Agents' Compensation</u>. This could be one of the really difficult areas in a period of continuing inflation. Although sales volume may well keep up with inflation, new premiums will likely lag behind, particularly if there is any pronounced shift to term insurance or other lower-premium forms of coverage. This fact, coupled with the agent's higher cost of doing business and a likely poorer policy persistency rate, could pose serious problems for the agent. The value of his deferred commissions in terms of purchasing power would obviously be less in times of inflation. The obvious answer to these problems would seem to be a search for ways of improving the agent's productivity.

All-lines selling would likely become more popular. The potential strain on agents' incomes might well lead to salaried agents or to other major changes in the distribution system. There would be a premium on seeking other, less expensive, ways of distributing our products.

5. <u>Individual Life Insurance</u>. The most likely effect of continuing high inflation would be a shift to term coverages almost exclusively. This would seriously impact on agents' earnings as well as on the company's cash flow position. There would be increasing demand for policies with automatic cost-of-living adjustments or other means of protecting purchasing power. The need for less rigidity and greater flexibility in policy provisions would make the life cycle policy a natural. The higher interest rates typically associated with high inflation rates would put an almost

irresistible pressure on companies to apply the investment year interest approach to their individual policies. This, in turn, could lead to a high lapse rate for existing business. Perhaps the biggest actuarial problem would be that of pricing the policies. The strain on nonpar premium rates would be severe. It might even force abandonment of the level guaranteed premium approach to individual life insurance. Even participating policies would not be immune to these pressures. We have found that our most popular currently-issued ordinary life plan, one with relatively low premiums, will stand an on-going inflation rate of 5% per annum but not one of double this amount. Should continuing double-digit inflation prove a likely possibility, we and other companies could well be forced into cutting participating policy dividend scales in anticipation of potential future losses on these policies.

6. <u>Group Life and Health Insurance</u>. The volume of group life insurance can be expected to escalate under inflationary conditions and appears to pose no serious industry problems. Group health insurance is another story. Although the lack of long-range rate guarantees for group health insurance would appear to give the flexibility for necessary upward rate adjustments, the potential for heavy losses in this field is tremendous. Past history would indicate that it is almost impossible to avoid substantial losses in group health insurance during a period of rapidly rising costs. Escalating employer costs for group health insurance would add to existing pressures for shifting these costs to the government under some form of national health insurance.

7. <u>Group Pension Plans</u>. Group pension funds, because of their long-range nature, could provide a welcome positive cash flow to companies writing this type of business. Such funds would also produce excellent investment earnings during the high interest rate cycle typical of an inflationary period. Most group pension cases would appear to have reasonably adequate protection against loss from cashouts during a time of depressed investment values. The biggest potential problem in the pension area may well be the extremely high cost to the employer, particularly for plans which are tied in some way to the rising cost-of-living such as those based on final average salary with cost-of-living adjustments for retirees. This high employer cost could well provide the impetus for employers to seek a shift of the retirement income problem from themselves to the government through an expanded social security system.

8. <u>Investments</u>. The investment area holds, perhaps, the greatest potential for damage to a company's financial stability in periods of continuing high inflation. Cash flow problems would likely be severe as cash surrenders and policy loans increased, mortgage repayments decreased, and new business gradually switched from permanent to term insurance. Although companies could seek to protect themselves by keeping a liquid position and concentrating on high quality investments, there is no way they can adequately protect themselves against a strong negative cash flow at a time when market values are depressed. Furthermore, under such conditions even a good quality investment portfolio can expect increasing losses from business failures. Perhaps the most serious problem under these conditions is one which extends beyond our industry. It involves the likely drying up of investment capital and a general falling off of confidence in all financial institutions. The inevitable result would be a push to turn over the entire problem to Uncle Sam. The preceding may sound like a scenario of gloom and doom, which certainly isn't my intent. It is not in any sense a prediction of what will occur in the future. My only purpose is to suggest in some way the magnitude of the problem and the potential damage it can cause. My personal feeling is that there is no way an individual company can cope with the problems posed by a long period of persistent, high inflation rates. Thus, I feel our efforts as an industry must be devoted to changing this scenario rather than adapting to it. In this connection I'm reminded of a bumper sticker I recently saw which read: "Bleeding Always Stops." The bleeding of our industry by continuing high inflation might well be stopped by a government takeover, but this is one cure which doesn't personally interest me.

MRS. DAPHNE D. BARTLETT: We have attempted to find out whether our actual renewal expenses on our older blocks of business have exceeded those we assumed when setting the premium rates. We have not found any evidence of this. I suspect that the reason is that our units have been increasing rapidly. This is one positive effect of inflation as it impacts life insurance! Has anyone seen evidence that their old annual expense assumptions are inadequate?

MR. CORBETT: Our experience is similar to Bankers. Until a couple of years ago, growth in the volume of units was greater than the rate of dollar increase in the associated expenses. This has not been true the last two years, with the result that our unit expenses have been increasing.

CHAIRMAN LAKE: The high rates of investment return that we have been experiencing in the last year or two have at least made us feel a little better with regard to the inflation in expenses but it's kind of an insidious offset in many respects. All mutual companies and many stock companies are in the unhappy position of their expenses being 100 cent dollars because there is no tax deduction for them if you're a Phase One company whereas offsetting investment income is fully taxable, so it takes considerable excess investment income to offset increasing expenses.

MR. WILFRED A KRAEGEL: Actuaries are generally quite innovative and we will probably find some good ways to get around some of the problems of inflation. I wonder, however, if we, as individuals and as members of organizations and as members of this profession, could do something about minimizing and hopefully eventually eliminating the basic problem itself, the problem of inflation. Do the panel members have any suggestions about how the actuarial profession might become more involved in tackling the basic problem which is so serious to us?

CHAIRMAN LAKE: This is a very good question. I noticed in a reference to an inflation section in the Canadian Institute of Actuaries meeting last year in Montreal, there was a real question raised as to whether the actuaries, and they also included the economists, were really speaking out enough on inflation. We are in a position of knowing the effects of it. Are we doing enough as a profession or, assuming we are not, what more can we do?

MR. RICHARDS: As an individual, attempt to educate yourself as to what the real mechanics of inflation are. You may not arrive at the same conclusions I did, but I think a little study is well repaid and if you do conclude (or even if you don't) that we've been on the wrong track these last 20-25 years,

as an individual get out and talk about it, at every opportunity. It may seem that by yourself you may not have much influence on the course of events but, if everybody concluded there is nothing they can do, nothing will get done.

MR. HOUSER: There aren't any easy solutions. I have trememdous confidence that, if the public wants to do something badly enough, they can do it. Our approach has to be to find some way of arousing the public about the potential long-range effects of inflation. We all tend to be pretty short-sighted, and, if the present isn't too bad, we aren't aroused to take any action. Whether we as an actuarial profession can do anything to help arouse the public, I don't know. It's something we ought to consider. We are in a profession which tends to take the long-range viewpoint, and it's the longrange view that scares you, not the short-range. The thing that bothers me after hearing Dr. Friedman's presentation this morning is the implication that there's not much we can do to solve the problem on a national scale. It's a global problem and requires a global solution.

MR. CORBETT: Point out the ramifications of inflation. Certain of our members have been doing this with regard to the social security system. The impact on municipal and state retirement plans of the liberal benefits that are being provided is of concern. As a profession there is little we can do about the basic problem. Our contribution should be to point out the ramifications of inflation in the areas that we have expertise. Meno asked an earlier question which I think is somewhat related to this subject. He asked what can nonpar companies do about inflation. One thing we have to start doing is raise some premiums. On term insurance, where you do not get an advantage from increased interest rates, expenses are growing and yet we have still not seen any real increase in rates. In fact, in the past year, we have noted further reductions. Until we, as life insurance company executives, see that the impact of inflation is felt by the policyholder regardless of what our competitors are doing - people will not realize that the life insurance industry is being hurt by inflation.

MRS. BARTLETT: I think that increases in rates may well occur. However, that's a "cop-out" in answer to the question of what actuaries can do to help solve the problems of inflation. What we all can do is get smart. There are many things that can be done internally in life insurance companies to cut expenses, to improve units costs, and to improve investment returns. There are things that can be done at the regulatory level to help reduce costs of life insurance company operations. Actuaries can encourage this and use their influence to improve cost effectiveness within their companies. They can also get ingenious in product design, creating products that are more adaptable to the inflationary environment. This may require regulatory changes, such as in the nonforfeiture regulations, to accommodate such products. Again, actuarial influence could be important.

MR. ROBERT C. TOOKEY: Reference is made to the Accounting Series Release (ASR) 166 - December 23, 1974, "Disclosure of Unusual Risks and Uncertainties In Financial Reporting."

Should actuaries speak out on inflation? Certainly we will be encouraged to do so and we may be required to do so if ASR 166 has any clout.

This particular release issued by the SEC did not mention the life insurance industry. However, they did state that "when unusual circumstances arise or where there are significant changes in the degree of business uncertainty existing in a reporting entity, the registrant has the responsibility of communicating these items to its financial statements." The registrant, of course, is the party that's involved with the SEC and all stock life companies that are publicly owned prepare annual reports that must meet the rules and regulations of that federal regulatory body.

This "disclosure of unusual risks and uncertainties" did enumerate several types of situations such as:

- 1. Loans and Loan Loss Reserves of Financial Institutions.
- 2. Marketable Securities.
- 3. Cost of Raw Material where Price is Still under Negotiation.
- 4. Small Number of Projects with Dominant Effect on Results.

As we analyze this ASR and attempt to determine what implications it might have on our industry, we should consider the following:

- very much to the point, the effect of inflation and recession and consumerism as it pertains to disability income claim reserves on disabled lives.
- 2. the condition of assets of indeterminable value (shaky assets).
- the consequences of a substantial increase in policy loans on liquidity and future earnings.
- 4. the impact of gasoline costing over \$1 per gallon on life insurance production in sparsely populated areas where a hard-working insurance salesman may log in 30 to 40 thousand miles per year.

Numerous other disclosures might be required, such as the effect on future earnings if a national health scheme is adopted along the lines of the socialistic European countries which would completely deprive the insurance industry of any share of the market, not only in the assumption of risk, but the administration of such a national health scheme.

There is a good possibility that the question, "Should actuaries speak out on inflation?" has already been answered for us and we may soon be making the necessary studies and supplying appropriate wording for footnotes to the financial reports of life insurance companies. These footnotes would invite the attention of the investor and shareholder to certain unusual risks and uncertainties, and in particular those related to the inflation problem.

CHAIRMAN LAKE: There is no more important topic for a professional group as we are, than this issue of making our voice heard. Obviously, there is a limit to what we can do on a national or world-wide basis but let us start at home. I will narrow that down by asking the question "Are we as actuaries making the effects of inflation on our business fully known within our own company?" Are all areas of our management fully aware of what inflation is doing and what it could do to us in the future? We have to speak out at home and we have to speak out in our communities and, to the extent possible, on a broader basis than that.

I've had people who are slightly knowledgeable about insurance matters ask "Why don't we index our products just like it is done with social security and like its being done in some other commuties?" In the pension area, we have a modified indexing where we have cost-of-living escalator clauses in pension benefits. Is a possible answer that we index investments in our products and just live with inflation?

MR. CORBETT: I have the basic concern that, if inflation results in people expecting retirement benefits to be completely indexed, life insurance companies will no longer be able to provide pensions. There is no way we can fund such benefits. Neither can the government - but they don't have to. They can operate on a pay-as-you-go basis supported by unlimited taxing authority. This has to be a real problem for final-average-salary plans if you have no idea of what that final salary might be. When you can have drastic leaps in inflation or in salaries, there is no way of funding the benefits. Therefore, you must move to a pay-as-you-go basis, and we cannot operate in that manner.

MR. RICHARDS: In principle, I am opposed to indexing because it really doesn't cure anything. It's a Band-aid. It puts off the evil day for a little longer until you really have to face up to reality. Perhaps it makes things a little more pleasant meanwhile but the ultimate problems are going to be there and they are going to be there in far worse form. On government indexing of bonds, it might work for a while but the mere indexing of government bonds does not add to the sum total of goods and services, and you have to consider how the government will find the additional funds to support indexing. There is also the fatal assumption that, in the long run, whatever else happens, the government will bail you out. I submit that if you look at that proposition carefully you may reach the opposite conclusion.

MR. LOUIS GARFIN: Would any member of the panel care to express an opinion in reply to the question posed in the final item on the agenda for this session which reads "Can long-term benefits continue to be soundly written with continued high inflation?"

MR. RICHARDS: Continued high inflation is probably impossible in this country until the long-term debt structure has been destroyed.

MR. HOUSER: I have to distinguish between short range and long range. I don't think, to date, that inflation has materially hurt the sale of permanent insurance. However, I think inflation could destroy permanent insurance over an extended period of time.