# TRANSACTIONS OF SOCIETY OF ACTUARIES 1970 VOL. 22 PT. 2 NO. 62 AB

# PANEL DISCUSSION

# THE IMPACT OF INFLATION ON THE LIFE INSURANCE INDUSTRY

- 1. What is inflation?
- 2. What is the recent history of inflation, and what does the short-term future look like?
- 3. What is the psychological effect of inflation on the savings habits of the consumer?
- 4. To what extent will the trend toward the sale of mutual funds and equitybased insurance products continue? In this context, how do you value the future of permanent cash-value life insurance?
- 5. How should the life insurance industry respond to continued inflation by the development of products and services offered to the consumer?
- 6. What are the present and ultimate effects of continued inflation on agent compensation?
- 7. What is the relationship of inflation to interest rates?
- 8. To what extent is inflation reflected in the expense factors used in gross premium calculations and profit analysis?

## Houston Regional Meeting

CHAIRMAN H. LEWIS RIETZ: Not being an expert, I turned to Webster's Unabridged Dictionary for a meaningful definition of inflation. As usual there are several definitions. Appropriate to our consideration today is the definition, "An increase beyond proper limits, especially in prices, the issue of inconvertible paper money, and so on."

Henry Hazlitt, popular economic writer, says, "Inflation is caused, always and everywhere, by an increase in the supply of money and credit in excess of the increase in the supply of goods and services."

Another writer parallels but qualifies Hazlitt's definition by saying, "Inflation is created whenever disposable personal incomes equal or exceed the supply of consumer goods and services available at current prices."

Other definitions that I encountered include the one from Milton Friedman: "Any increase in the supply of money, defining money in its broadest sense to include credit." Still another economist defines inflation as "Any increase in the prices of widely used goods."

I am one who accepts any one or a combination of these definitions of inflation. Certainly the last one we have all experienced. As an example,

I referred to a budget book my wife kept during the early years of our marriage. In 1937, the last year she kept the budget book, I found recurring such entries as the following:

Cents

	CC1163
1 lb. bacon	19
4 rolls toilet tissue	15
2 lb. coffee	37
4 cans tomato juice	25
Cornflakes	
Bread	7
4 filet mignons	95
2 cans sliced pineapple	32

Ask your wives what these items cost today, and you will certainly understand what inflation is.

However you define inflation, I, for one, am sold on the economic principle that inflation both in the United States and in other industrial nations—England, Germany, France, Japan, and so forth—always originates from governmental action or lack of action. Inflation is initially triggered by governmental monetary policy, by governmental fiscal policy, or by a combination of both.

Wars inherently trigger inflation within the economy of nations at war. This results because a government at war lacks either the courage or the ability to increase taxes sufficiently to meet the enormous war expenditures. Nor will modern government act to curtail substantially domestic economic expenditures in wartime. History here and abroad in both World War I and World War II indicates the inability or failure of government to attract sufficient savings through bond sales to finance the difference between wartime expenditures and wartime revenues. Hence inflation occurs.

What is the recent history of inflation? One accepted index is that the dollar of today has only as much purchasing power as 37¢ had in 1939. During this time we have had between a five- and sixfold increase in the supply of money. Hence price increase, according to the monetarists of whom Milton Friedman of the University of Chicago is the leading modern proponent, would have increased from five- to sixfold had it not been for the rather substantial increase in productivity which we have enjoyed during and since World War II. But the fact remains that the supply of money and credit has increased to a greater extent than the increase in productivity, and we have experienced a long inflationary cycle.

With regard to the question, "What does the short-term future of in-

### THE IMPACT OF INFLATION

flation look like?" it is like the wheel of fortune at the carnival—you pay your money and take your chances. Even the economists do not agree.

Milton Friedman within recent weeks has warned that inflation-control efforts by government have already been carried to such extremes that an outright recession is all but inevitable unless the monetary supply is increased promptly. On the other hand, Robert V. Roosa, former Undersecretary of the Treasury, Pierre Rinfret, Eliot Janeway, all highly respected business economists, caution that governmental steps taken to date have and will continue to be ineffective and that more drastic measures are needed to bring the desired results.

So take your choice—either extreme or a middle-of-the-road position and you will find some recognized economists agreeing with you.

DR. JAMES A. BYRD:\* I would like to hitch onto some of the comments that Lew included in his prepared remarks from nationally known economists and point out that the topic of the big debate among professional economists—whether academic vs. business economists or private vs. public sector economists—has changed considerably since the 1930's. In doing so, I do not need to dust off many of those details prior to the 1930's —the Great Depression.

The big debate, then, in economic circles (the great formulations or attempts to formulate theories to explain and then to anticipate the economy) was whether or not the American economic system tended toward stability. That is, were there forces in the private sector of the economy that required only a minimum role for government—federal, state, and local a service role for government or a protective role, if you please? The big debate was whether we had a built-in tendency toward stability so that we could reach high levels of employment, output, income, and purchasing power without any tinkering and tampering public policies.

Well, the thirties proved clearly that the economy did not have built-in stability. So, the big debate became whether it had a tendency toward instability. Here we pick up another major stream of economic thought first published by Lord John Maynard Keynes in England. The big debate began in the forties during World War II as to whether or not we had so unstable an economic system. At the end of World War II, when things had to gear back to peacetime and all this stored-up purchasing power might or might not come forth, would we have a highly unstable economy which would spin off into another depression? We did not, as a matter of fact. We

\* Dr. James A. Byrd, not a Fellow of the Society, is Assistant to the President, University of Houston.

had a period of unparalleled, until then, economic expansion. When the lid came off, that is to say, when the price and wage controls came off, we did find that there was a substantial pent-up purchasing power that came forth, and we began to experience our first recent waves of inflation.

Now the big debate has become not whether we are certain to have inflation, but (whether you speak, on the one hand, of the monetarists or, on the other hand, of the fiscal or monetary policy economists) whether we can keep it down to a rate that is livable, sustainable, and one that will continue to promote high levels of employment, output, income, and maximum purchasing power for the most people.

Two dates are extremely significant to modern economists, whether they are conservative or liberal in their views. The first is 1946. Out of some real fears that we were headed for a postwar depression, the Congress began discussions and committees cleared legislation that came forth in 1946 as the Employment Act. It is extremely significant that, in its very last draft form, the title of that bill was changed, one word being deleted— "full." That is to say, it was proposed to be a *full* employment act and now it is *the* Employment Act of 1946. It charges the federal government in all its aspects to gear its affairs, its policies, in such a fashion as to promote high levels of employment, output, income, and purchasing power. Out of that legislation, and some of the new institutions that it created, we have definitely become an economic system that still has a fear of instability and still has an expansionary bias. As a result, we tend to overreact any time there is a slowdown, a recession, a regression or whatever word you want to use to describe the leveling-off process.

The year 1951 is another significant year to economists. That was the year that, for the first time since 1940, the Federal Reserve authorities had their hands freed of a pledge made to maintain the prices of government securities at or near par and to maintain thereby a structure of interest rates which would minimize the cost to the Federal Government of financing its wartime deficits. Again a debate began among economists as to whether the Federal Reserve, our principal monetary authorities, was generating instability in adopting policies of leaning against the winds of inflation or deflation.

Let me remind you now that the prime rate was lowered week before last from  $8\frac{1}{2}$  to 8 per cent, a reduction which the bankers said rested largely on political rather than on economic grounds. The prime rate when first published in 1933 had remained at  $1\frac{1}{2}$  per cent and similar levels from 1933 until 1947; and, as recently as 1951, the prime rate of interest was at  $2\frac{1}{2}$  per cent.

Are you aware of the fact that the rate on 91-day Treasury Bills was

as low as three-fourths of 1 per cent in 1950? Have you forgotten, or are you aware, that the discount rate of Federal Reserve banks did not go above 4 per cent in recent years until the 1960's? Are you aware of the fact that the rate of inflation during the decade of the sixties averaged only  $2\frac{1}{2}$  per cent per annum and that for the year 1969 it was a little in excess of 6 per cent?

Are you aware of the fact that recent studies have demonstrated a concept that has been in economic theory for a long time, the so-called natural rate of interest? This "real" or natural rate of interest, corrected for creditrisk considerations and for inflationary considerations, is demonstrated to be at or near 3 per cent per annum. Nominal rates of interest that are higher than 3 per cent reflect a *premium* demanded by investors, whether institutional investors or individual investors, which is a *premium for inflation*. These more recent studies were summarized in a recent article in the Morgan Guaranty Bank's *Economic Newsletter*. This article concluded that the "real" or natural rate of interest for new top-quality corporate credit on twenty-year or longer term, is really 3 per cent and that, to the extent that it is in excess of 3 per cent, it includes a premium demanded for inflationary expectations.

I would like to recall for you that the next major development in social insurance—the one that was "promised" by Presidential Candidate Nixon in 1968—has not yet shown up in the form of actual legislation in the Congress. This "promise" is to tie the benefits of social insurance programs to some sort of consumer price index. It is coming. This particular proposal, if not picked up by that person, is quite likely to be picked up before 1972 by an opponent.

Last week, given such an option for the first time in the teacher retirement system for the state of Texas, I signed a contract under an optional retirement plan rather than electing to remain under the existing fixeddollar plan. I personally elected, looking at the next twenty years, to go 100 per cent variable. I feel I already have, and my life underwriter tells me that it is so, a reasonably adequate life insurance program. (I know very well that I can never buy all the life insurance that I should really like to have.) But, the point that I am trying to make is that, from here on, it is quite clear to me professionally—and, if I think this way professionally, I had better think this way personally— that I should have as many of my "bucks" going into variable plans as possible.

In the current big debate, then, I come down on the side of an average annual rate of inflation in the seventies, given the political economy in which we are going to have to live, plan, and do business, of something approaching  $2\frac{1}{2}$ -3 per cent per annum. In fact, I do not see that we can

ever get back to the average annual rate of the fifties, which was, incidentally, about  $1\frac{1}{4}$  per cent. The pressures are too great. The demands and the politics are too compelling. I honestly believe that I would plan on the side of  $2\frac{1}{2}$ -3 per cent. I would therefore support Bill Nicol's position: that it will be a long time before we can be thinking of interest rates lower than 6 per cent. If the real rate is 3 per cent for the best credit names in the country and if there is to be  $2\frac{1}{2}$ -3 per cent average annual inflation on the consumer price level, then I would suggest to you that at least a  $5\frac{1}{2}$ -6 per cent long-term rate of interest is a built-in fact of economic life.

Let me leave you with this closing thought. If the gross national product is going to be at about a trillion dollar rate in 1971, and it will; if the average annual rate of real growth is going to be 4 per cent in a decade, and I sincerely believe that it will; if the rate of inflation is going to be  $2\frac{1}{2}-3$ per cent per annum annual average, and I do believe that it will; then the gross national product for 1980 will be two trillion dollars. Of that growth, 60 per cent will be a real increase; 40 per cent of it will be an inflationary increase. There will be another 30 million people over the 200,000,000 we now have, which represents a 15 per cent increase. I suggest to you that more and more people are going to have more and more money income and, as we attain higher levels of family income, many, many more discretionary dollars. I ask you this question: What, in the current thinking in your company, do you plan to do about it, to give your company its fair share of those discretionary dollars?

MR. WILLIAM K. NICOL: I believe that it is inevitable that the trend toward the sale of mutual funds and equity-based insurance will continue and, in fact, that products will accelerate. I would point out that in both Great Britain and in Canada, where there have not been the same regulatory restrictions, equity-based insurance products have proliferated over the past few years, and in large degree at the expense of permanent cashvalue life insurance as we have known it historically.

I would also point out that the National Association of Insurance Commissioners, at its meeting in New Orleans last December, adopted a broad Model Variable Contract Law and Regulations which envisage equitybased life insurance in addition to equity-based annuity products.

Those of us who have followed from year to year the reports of the actuaries of the American Life Convention have seen the growth in savings dollars going to mutual funds and other devices to a large extent at the expense of the savings element of life insurance. It also should be noted that our competitors for the savings dollar, such as the mutual funds and savings and loan associations, are beginning to offer life insurance as part

of their portfolio; I believe our inevitable response must be to offer their type of product. Over the past year, the stock market has been at a low ebb, and mutual funds may seem to have lost some of their popularity. As it inevitably must, however, the stock market will move upward in the future, and I believe that the popularity of mutual funds and other equity forms of investment will follow along. In the life insurance business, we may be pandering to this equity phenomenon since the current trend for fixed-dollar investments, such as mortgages, is to have an equity kicker as part of the package before our investment people find it worthwhile. The foregoing remarks are particularly true with respect to pensions and annuity forms, and the future is perhaps a little more clouded with respect to equity-based life insurance forms, since there are statutory and regulatory hurdles to be cleared. Furthermore, there is a very large part of our historical market for life insurance which is in the middle economic ground of the population which may not be attracted to individual sales of equitybased life insurance products.

The question is also asked, under question 4, "In this context, how do you value the future of permanent cash-value life insurance?" The historical record will show that permanent cash value life insurance has been on a downtrend for a good many years, as is evidenced by the decreasing amounts sold of industrial life insurance-which was predominantly of a permanent cash-value type-and in the growth of term forms, group insurance, credit insurance, mortgage insurance, equity funding, and even minimum deposit forms, which masquerade as cash-value life insurance but really are term insurance. The situation may be a little different in the United States from that in the United Kingdom or in Canada, where there have been tax incentives to the individual to buy life insurance; and it is not impossible that such incentives might make an appearance in the United States if the government desired the encouragement of thrift. Frankly, permanent cash-value life insurance is encouraged by the industry not so much for its own sake as it is as a means of providing a viable method of financing agents with the substantial front-end loads which are part and parcel of most permanent cash-value life insurance.

I see little hope for growth of permanent cash-value life insurance so long as the statutes limit the actuary to a  $3\frac{1}{2}$  per cent maximum interest rate for nonforfeiture calculations and policy loans to a maximum interest rate of 5-6 per cent and when the financial soothsayers tell us that we shall never see 6 per cent money again. I do not share their opinion, but I feel that it may be a good long time before we do see 6 per cent new-money rates. One other negative factor with respect to permanent cash-value life insurance may relate not just to inflation but to a lack of stability in the

world as we see it today and to a loss of those traditional values which were the companions of permanent cash-value life insurance.

With respect to question 6, "What is the present and ultimate effect of continued inflation on agent compensation?" I believe that these effects will be material for the combination agent. What used to be a prestigious occupation has now come to the point at which we have great difficulty in recruiting personnel and keeping debits filled. More and more of the combination agent's compensation is in fixed dollars independent of sales activity; and companies must increase the combination agent's dollar sales and collection activity in order to create a situation in which he can earn a satisfactory living. The combination agent's clientele is becoming ever more government- and group-oriented with respect to its insurance programs, and the effect of the growth of welfare statism does not enhance his markets. To the extent that he continues to collect premiums, we are probably going to find ourselves with an inefficient method even on a monthly collection basis and perhaps shall need to turn the premium-collection function over to those institutions which seem to be able to do this chore better—such as the finance companies and the like. One hope for the combination agent is that his clientele may not be equity-oriented and may be precluded from this market by SEC requirements of finance suitability.

With respect to the ordinary agent, I do not believe that we can sustain an agent financially on term insurance alone. If he is to sell equities, they carry with them a different compensation philosophy which is not compatible with service to the broad spectrum of individual prospects for insurance. We may need to go to salaries, with appropriate supervision devices, rather than to commissions for our agents. I believe that there still will be a role for the real professional life insurance agent who is a specialist in estate programing and who has combined skills of an actuarial, legal, accounting, tax, and personal adviser nature. While he is none of these, per se, he manages to bring parts of all of these disciplines to bear on his client's problems. In the future, he may not be commissioned at all but may charge his clients fees for his services as a financial adviser. For the agent who is something less than a top-notch professional, there is a possibility, with the use of computers, of true programing for his clientele in a life-cycle mode which may enable him to operate efficiently and effectively.

We hear much today, particularly from Washington, about consumerism, where consumer protection and disclosure to the consumer are almost ends in themselves. We have seen this particularly with respect to "Truth in Lending" and with respect to certain senatorial investigations of credit

### D26

insurance. Life insurance already has been criticized for its front-end load concept on permanent insurance, and it is inevitable that we ultimately shall be forced into some modification of this pattern, although we may not have to go as far as has been proposed for certain forms of equity investment.

Inflation means a need for larger amounts of insurance, but it carries with it the seeds of a change in marketing and availability of expense dollars; so that I believe there will be very material effects on the terms and amounts of agent compensation.

MR. LLOYD K. FRIEDMAN: When I was asked to be on this panel, it was understood that I was to present the point of view of the "small company." While it is true that all the insurance company clients of our office easily qualify for the Smaller Company Forum under any standard ever established by this Society, their operations are certainly heterogeneous and the impact of inflation on them differs widely. Of the twentyfour legal reserve company annual statements in which our office had a part, four were for companies specializing in funeral payment or industrial insurance; four companies confine their activities to credit insurance; two companies are in the mail order field; one company wrote almost nothing but annuities; one company operates exclusively in rural communities; two companies are affiliates of large fire and casualty producers; two companies are subsidiaries of giant corporations; and only the remaining eight companies are unattached companies primarily engaged in writing ordinary insurance.

The term "small company" is as misleading as the stereotype of "the poor" so overworked currently in political and sociological discourse. So I shall not talk about the impact of inflation on the "small company" but its impact on some small companies.

In the industrial and funeral payment policy field, increase in size of policies has helped to keep escalation of unit costs from having too much effect on premium rates. Mortality among the purchasers of these policies shows continued improvement in contrast to the leveling noted for true ordinary insurance. Nevertheless, a general rate revision put into effect this year by one of our clients resulted predominantly in increases. Although it is far too early to reach definite conclusions, sales do not seem to have been discouraged. It is to be noted that premiums for this kind of insurance are considered to be normal family expenses, and, although the coverage is generally permanent cash-value life insurance, it is seldom thought of as an investment. The public simply considers the higher outlay a part of that to which it has become accustomed—a continually increasing cost of living (or of dying).

Inflation has had virtually no impact on insurance operations of the companies specializing in the credit insurance field. Increases in amounts of policies and certificates and ready availability on a service basis of data-processing equipment have kept relative expenses constant or even decreasing and enabled small companies to compete in this field. The chief impact here has been that of the money "squeeze" on the institutions extending credit.

It appears that inflation has had a helpful effect on the marketing of insurance by mail. One client, whose chief life insurance product is a fiveyear renewable and convertible term policy sold by mail, has had success lately with a mail campaign for conversion of these policies to permanent insurance. The required dollars are not as hard to come by, and the investment aspect of life insurance is generally overlooked. When variable life insurance becomes available, it would seem that, barring insuperable legal obstacles, it would be a suitable product for mail solicitation. The problem of agent compensation in an inflationary economy is escaped by this type of company. It is confronted instead by rising costs for advertising, printing, and postage.

Our largely rural client succeeds in controlling its costs better than its city brethren. Its home office is located in a town with a 1960 population of 1,680; its average-size policy is low by current standards. It operates through agents and does not hesitate to finance them; it achieves a better-than-average investment return. It could be said to "ignore" the problem of inflation. Perhaps even in deep East Texas that cannot go on indefinitely.

The affiliates of the fire and casualty producers have the same problems as other ordinary companies, except that for them rate competition is keener and they do not have to finance agents. Both our clients of this type have serious interest in equity-based products and have devoted serious thought and some study to them but find no practical way to offer them.

The annuity company has pursued self-employed retirement and other tax-sheltered situations with surprising success. There is no equity element in the product. The selling point has been a provision which ties dividends during the deferment period to the over-all investment performance of the company, including capital gains and losses.

Each of the subsidiaries of the large corporations has in some measure joined in the trend toward equity-oriented products. One has qualified some of its agents to sell a mutual fund which is another subsidiary and also offers separate fund facilities on a group basis. The other has placed large amounts of permanent life insurance as part of a package sold through an organization originally formed to sell mutual funds.

One of the straight unaffiliated ordinary companies has qualified some of its agents to sell variable annuities and a related mutual fund under arrangements provided by one of the large professional reinsurers. Another has slanted its investment portfolio heavily to common stocks of banks, which are the only equities permitted without restriction to a Texas life insurance company as investments of "any of its funds and accumulations." The investment performance, excluding 1969, has been rewarding and has been properly reflected in the dividend scale. Although the company has not been too modest to inform its agents of such good results, sales have been unsatisfactory. This is perhaps due to a company policy in financing agents, which is not particularly liberal.

Specifically, my answers to the questions raised in the program follow starting with question 3:

3. The consumer's incentive to save is eroded, and the sale of life insurance as an investment is seriously impaired.

4. The trend toward the sale of mutual funds and equity-based products will continue. Permanent cash-value life insurance will be bought in conjunction with these products and more especially will continue to be bought for protection at least in certain special situations.

5. The life insurance industry should use all its ingenuity to develop products and services suited to the needs of the consumer. It should not discard its proved products and methods; they still have many uses. Variable life insurance seems to be a natural development which will carry out the industry's essential function of protecting the real income of the family.

6. Financing of agents remains the most formidable problem of the young company. The amount of surplus such a company can devote to financing is limited; it cannot afford heavy losses; at the same time, production is needed to reduce unit costs. Inflation aggravates this situation as the cost of sustaining each agent grows. The industry's trouble is that it has always spent so much on poor agents that it cannot adequately compensate good ones. The answer must be fewer and better agents, but this is easier for me to say than for agency departments to accomplish. The trend to mass marketing, sales through the mail, and other methods of reducing man-hours devoted to selling will continue.

7. Anticipation of inflation leads to higher interest rates. The expectation is more important than the realization. Both private and governmental decisions are based on psychological considerations.

8. The industry has been slow to apply higher unit costs in rate structures. The \$8.00 and \$10.00 policy fees developed in the 1950's are more common than those of higher amounts. Is their continuance justified? Has automation been that successful in controlling unit costs? It certainly has not for smaller companies.

The questions and discussion assume indefinite continuance of inflation as a way of life and investment in equities as a suitable hedge. The last few years raise some doubt as to equities; such investments have not followed the trend of the cost of living. What then of the products sold on that assumption?

As Dr. Byrd told us, economists expect continued inflation, although a slower rate is hoped for. It could be that way. But long observation of the economic system as an amateur suggests to me that the only tendency that does not change is the tendency to change. Please do not associate this thought with ideas expressed in this Society some years ago that our duty was to fight inflation, not to adapt to it. I think we must adapt to it in our products, in our agency compensation, and in our thinking, but we must not adapt so completely that we do not maintain flexibility for reversals of trend or other new developments.

MR. JAMES B. H. PEGLER:\* I should like to take up one point made by Mr. Nicol when he referred to the situation in Britain and said that the very considerable expansion of unit-linked contracts had been at the expense of the classical type.

I agree with him about the considerable proliferation of this type of contract, but I am not sure that he is right in saying that it has been all or even largely at the expense of the classical type of contract. As Mr. Nicol mentioned, life insurance is encouraged in the United Kingdom by a taxation rebate off the premium. Therefore, quite a lot of unit-linked life assurance has come from people who primarily are motivated to take out an investment contract, but, owing to our taxation system, have been able to get it more cheaply by combining life assurance with it.

I think that the first company issuing unit-linked life assurance started operation in about 1956, but this development was frowned on by the oldestablished companies, rather unwisely I think. As you may know, we have no limitation on the type of investment bought by life assurance companies in Britain, and a considerable part of their portfolios has been invested in common stocks. This investment has been very successful; there has been considerable appreciation in market values, but the difficulty has been to distribute the fruits of this success to the right generation of policyholders.

\* Mr. Pegler is President of the Institute of Actuaries.

Under the classical system with investment largely in bonds, reasonable justice was done by distributing the income as it was received. If, however, instead of investing in a fixed interest security (which might be yielding in 1956 something of the order of 4 or 5 per cent and can now be bought to yield about 9 or 10 per cent, you bought an equity share with an initial yield of 3 per cent or perhaps even less, the income available for dividends to policyholders dying or "maturing" in the early years was much less. On the other hand, of course, you cannot distribute unrealized appreciation because it may disappear. You have to hold quite a considerable depreciation reserve, and British actuaries have perhaps been rather too cautious in the reserve held. Because of what the public has regarded as excessive caution, there has been a trend toward the unit-linked type of contract, under which the policyholder gets all the appreciation---and of course suffers all the depreciation if it occurs.

This I believe to be the main reason for the popularity of unit-linked contracts, and it has had the effect of making British actuaries give new and deeper consideration to the problems of equitable dividend distribution when investment portfolios have a substantial proportion of common stocks.

MR. JOHN G. SELIG: In the past twenty-five years, long-term interest rates have been increased moderately up until 1965. Beginning in 1966, interest rates increased drastically, going from an average rate of approximately  $4\frac{1}{2}$  per cent for good-quality long-term bonds to over 8 per cent for new AAA issues during 1969. The rapidly increasing rates are primarily due to inflation, which has been caused by the Vietnam war, which triggered an increase in the monetary base and money supply due to the deficit financing.

Recent studies conducted by the Saint Louis Federal Reserve Bank indicate that the nominal rate of interest is greatly affected by the rate of inflation, with most of the effect on interest rates occurring within two years following a change in the price level. The real rate of return (the nominal interest rate less the rate of inflation) has remained fairly stable over the years, fluctuating between 3 and 4 per cent (see chart I).

We have passed the high point in this interest rate cycle. It is quite likely that the nominal rate of interest will drop 1-2 per cent over the next several years. I do not expect to see interest rates as low as they were in the early sixties, since it is my opinion that inflation will continue unabated for many years in the future. Our economy is structured with an inflationary bias that has been continuing for the past one hundred years.

Inflation will be reduced from a rate of 6 per cent per annum currently



CHART I

\* Estimates of "real" interest rates were obtained from statistical regressions of nominal interest rates on current and lagged price changes and on variables thought to influence "real" interest rates (i.e., the level of and changes in output and changes in the deflated money stock). See William P. Yohe and Denis S. Karnosky, "Interest Rates and Price Level Changes, 1952-69," *Review*, Federal Reserve Bank of Saint Louis, December, 1969.

NOTE.—Latest data plotted: nominal—January; real—January estimated. Prepared by Federal Reserve Bank of Saint Louis.

to a rate of perhaps 2-3 per cent per annum within the next three years provided the money supply is allowed to increase at a more moderate rate than it did in 1968. The reduced rate of increase in the money supply in 1969 should be reflected by a reduction in the rate of inflation the latter part of 1970 to a rate of approximately  $4\frac{1}{2}$  per cent per annum.

Over the longer term, the next ten years, interest rates will remain high for a combination of the following reasons:

1. We will continue to experience inflation at the rate of 2-3 per cent per year for the foreseeable future with bouts of more rapid inflation in some years.

2. Our country has been experiencing a balance-of-payments problem for the past twenty years, and there is no reason for a reduction in our balance of payments deficit over the next several years. We will be forced to maintain a high interest rate structure in order to prevent our monetary reserves from repatriation by overseas lenders.

3. Capital expenditures over the next ten years will be massive. Much of our plant and equipment is rapidly becoming obsolete, more rapidly than in the past, and will have to be replaced. This spring, even though interest rates for new corporate bonds of Aaa quality are at an  $8\frac{1}{2}$  per cent level for new issues, we have had a rapid increase in the volume of bonds scheduled for sale this year.

The estimated demand for long-term credit is \$47.7 billion for 1970. The total demand for all credit in 1970 is estimated at \$76.1 billion, which is lower than the credit floated in either 1968 or 1969. On this basis, I would expect that the interest rates will drop but certainly not to any great extent.

The anticipated high rate of return on fixed income securities should provide a substantial margin for profit and contingencies for life insurance companies. The high nominal rate is predicated on a relatively moderate rate of inflation. From the financial standpoint of the insurance companies, it is quite likely that the high nominal rate of return will allow most companies to show a substantial increase in surplus over the next five years.

### Hartford Regional Meeting

CHAIRMAN MORRISON H. BEACH: It is not without some concern and trepidation that we approach the subject of inflation and its impact upon our business—particularly at this time. A certain amount of unpredictability must remain as a characteristic of a free economy, and, if I were to describe the position in which we find ourselves today, it would be to say that we are witnessing the delicate balancing of several forces within our economy.

We are witnessing a situation in a congressional election year where the administration is obviously trying to control the inflationary elements in

our economic growth without causing spiraling unemployment, requiring some measure of self-control to be exercised on wages and prices.

Also, for the last few years, we have been witnessing the unusual circumstance of rapidly rising prices at a time when stock market indices have leveled off and, in fact, have declined sharply for the last year. We find signs of organized labor with a membership more demanding than its leadership. The full impact of this is not known. We must call to mind the dramatic circumstances of the post office strike, the air controllers' slowdown, as well as the present Teamsters situation. Since the objective of the membership is to negotiate *large* wage increases, our ability to assess the future must take into account the delayed impact of the price increases to the consumer which inevitably follow large wage settlements.

The impact of inflation on our business comes from many directions increases in costs, changes in investment returns and stock prices, and certainly from changes in customer attitudes toward our products and services.

We are clearly aware that the percentage of total annual personal savings put into various life insurance forms has declined from 50 per cent in 1945 to 25 per cent in 1968. While the decline cannot be attributed entirely to inflation—in view of many other economic and business events in the postwar period—there is, I believe, no question that inflation has played a significant role in this adverse development.

There are many kinds of inflation—possibly each with a different effect on our business—and, in fact, some economists say that, if prices rise less than 2 per cent annually, there is no inflation. Charlie, would you comment on this?

MR. CHARLES MOELLER, JR.:\* Inflation is a complex phenomenon that is usually the result of a number of contributing factors and is often characterized by the misleading practice of referring to the disease, inflation, and its major symptom, rising prices, as though they were interchangeable.

Once under way, general price rises produce further inflation by enlarging credit and wage demands. These, in turn, produce distortions in the relationships among various prices and create maladjustments in the savings-investment processes. Thus a rapid and large rise in the general price level, in addition to being the major result of inflation, is at the same time a cause of further increases in prices.

The lag that usually occurs between inflationary forces and the rise in \*Mr. Moeller, not a member of the Society, is Vice-President-Economics of Metropolitan Life Insurance Company.

prices is another factor tending to complicate a cause-and-effect analysis of a period of rising prices. A disproportionate and sharp increase in the quantity of money and credit relative to goods available for purchase does not automatically and immediately cause increased spending for goods and services. The increased quantity of money and credit usually is accumulated by individuals, businesses, and banks. At some later date, it provides the fuel for spending to rise faster than the supply of goods and services. Thus the reference to "monetary inflation."

Government budget deficits can provide a substantial inflationary factor as the government competes for funds in the money market. Commercial bank investment in federal securities expands the nation's credit base, enabling overstimulation of private demand. Furthermore, nonbank investors own a highly liquid asset which can provide purchasing power at a time when monetary authorities are trying to restrain "demand-pull" forces.

Another reason why inflation is so complex a phenomenon is the many causative factors which can be involved and the difficulty of assessing the exact weight of each in the particular situation. Inflationary conditions are attributed to one or more of the "demand-pull" or "cost-push" factors. In general, when prices have been forced up on account of scarcity-when government, investors, and consumers combined want more than 100 per cent of the available supply of important classes of goods and services--we have a demand-pull situation. Wage-push inflation results when the sellers of labor, whether unionized or not, drive up the cost of their services. Wage-push is usually part of the wider cost-push, wherein the prices of both labor and nonlabor items are rising. The wage-cost-push inflation is felt most when wage scales are raised at a far sharper rate than can be financed out of gains in productivity, the latter usually made possible largely by funds provided by investors to acquire better plant and equipment. Unless offset by productivity or other economies, higher costs per unit exert inflationary pressure and force up price levels of the public at large.

Whatever combination of causes may lead to inflation, inflation itself certainly leads to economic distortions. Under runaway inflation, the public loses confidence in the value of national currency. But even in periods of so-called mild, creeping inflation, arising out of limited but persistent year-to-year increases in the price level, many people become very troubled over the cumulative erosion in the value of their money. That reduces the incentive among people to save and to invest in fixed-dollar instruments, savings bank accounts, and the like. In general, under inflationary conditions, there is no soundly based business confidence conducive to solid long-term national economic growth. MR. E. SYDNEY JACKSON: There are two major effects of inflation on savings: first, it alters the form in which saving takes place and, second, it leads to a reduction in its volume.

Given generally held expectations of continued rising prices, interest rates will tend to rise as borrowers seek long-term fixed interest funds---to finance their augmented investment and consumption needs-in anticipation that they will be able to make repayment in the future with an increasingly debased currency. Similarly, lenders will demand higher yields, partly because of inflation-spurred increased loan demands and partly in an attempt to maintain their expected real rate of return. With accelerating inflation, however, there will be a tendency for lenders to turn away from long-term fixed interest investment to common stocks, real estate, and, eventually, inventory, commodity, and currency speculation. In such a setting, the only debt issues that generally retain any attraction to investors are those with "kickers," such as convertibility or extendibility. or which are of short maturity. In extreme cases, when the inflationary process continues unchecked, the markets for fixed interest securities, and the institutions that service and operate in them, start to wither as people try to avoid being stuck with depreciating claims. As these markets and institutions are generally extremely important in mobilizing and allocating the individually small but collectively significant savings of the personal sector, this process usually results in increased consumption and a net loss of aggregate savings.

It is thus easy to deduce the implications for the life insurance industry, with its emphasis on contractual guarantees and fixed value investments, of a continued high rate of inflation. Admittedly, inflation results in higher nominal (but not real) interest rates, but certainly the higher returns thus obtainable on new money are unable to offset both rising business costs and capital losses on existing investment portfolios while, at the same time, allowing for increases in dividend rates sufficient to offset the depreciation of policy values.

The question thus arises whether this effect is realized by the general population, for, if it is, serious marketing problems may develop for the industry if inflation is not brought under control. The results of the MAP survey for the Institute of Life Insurance suggest that in 1967 about half the survey population recognized inflation as detrimental to life insurance. It is likely that the public consciousness is now considerably more aware of both the fact and effects of inflation than it was in 1967. Consequently, a similar survey taken in 1970 would probably show considerably more than 52 per cent of the population agreeing that life insurance will be paid

### D36

off in dollars of decreased value. On the other hand, about three in ten thought that the more likely we are to have inflation, the more sense it makes to buy life insurance—possibly under the rationale that it would require more coverage to maintain a given level of real benefits. However, the 1967 survey also showed that the higher the respondent's educational level—and thus probably the greater his income and attractiveness as a buyer of life insurance—the less likely it was that he would perceive of inflation as increasing the need for insurance.

MR. MOELLER: There are both theoretical evidence and empirical evidence to suggest that a sustained rate of inflation will have an effect not only upon the proportion of income saved but the composition of savings assets as well. Most economists feel price increases have had a much more important influence on savings habits in the past few years, as the public has become more aware of inflation and has come to expect it to continue. Surveys conducted at the University of Michigan indicate that, during the period from 1951 to 1957, the percentage of respondents expecting prices to rise in the following year was never greater than 54 per cent and was usually much less. In the past 5 years, on the other hand, the percentage of people expecting inflation to continue for the next year has increased from about 70 to 85–90 per cent.

Widely differing consumer responses to expected price increases are conceivable. Some would lead to a higher rate of savings and some to a lower rate. Saving would be diminished, for example, if the consumer accelerates his expenditures on certain goods in advance of current needs. Similarly it would go down if those who find that their income has been eroded by inflation attempt to maintain their standard of living by increasing the rate of consumption out of income. At the same time, people whose money income goes up faster than prices may increase savings in proportion to their new income. The aggregate effect will be an increase in the average propensity to save for the consuming public as a whole. On the other hand, factors which tend to decrease saving must be balanced against those which work in the other direction. Many consumers who feel that their real income has deteriorated due to inflation will reduce expenditures. It will be particularly likely to happen if they feel that the situation is likely to be sustained for some time.

Recent publications of the Survey of Consumer Finance indicate that the majority of respondents do feel that, on balance, inflation affects them adversely. Only about 40 per cent, however, have any specific strategies in mind to safeguard themselves against price rise. It would appear that,

on balance, their actions would increase the rate of saving. For example, 12-13 per cent of those surveyed indicated that they would reduce overall spending, while another 5-6 per cent would postpone certain purchases. Only 2 per cent of the group said that they would decrease their rate of saving and buy in advance of further price rises.

While the influence of inflation on saving appears to have increased substantially in recent years, it is not possible to isolate the aggregate effect in the national income accounts. The primary difficulty arises as a result of the interaction of prices with other factors which also have a strong influence on personal savings, such as expected business conditions and future incomes, interest rates, the tax surcharge, shifting age distributions, and the like.

Inflation not only affects the level of saving but the composition of savings assets as well. There are both a direct effect due to the public's desire to hedge against further price increases and an indirect effect which works through increases in the rate of interest. The sharp rise in market interest rates and inflationary pressure in the economy have encouraged the process of disintermediation---that is, the direct investment of funds in the credit and equity markets by individuals rather than the more common practice of individuals channeling their savings through intermediaries who in turn invest in the credit and equity markets. Growing pressures to hedge against inflation as well as high yields available in the government, municipal, and corporate bond markets, coupled with growing pressures to hedge against inflation, also result in investments being made directly rather than through financial intermediaries, whose total portfolio yields lag considerably behind market rates. Investment made directly by the private domestic nonfinancial sectors is expected to average 19 per cent over the next five years. This compares with 18 per cent for the period from 1965–69, 28 per cent during the 1966 crunch. and about 45 per cent last year.

During 1969 the flow of savings into the principal financial intermediaries decreased by 22 per cent in comparison with a 21 per cent decline in 1966. Mutual savings banks and savings and loan institutions were hardest hit each time. The flow of savings into these institutions declined by 54 per cent in 1966 and 37 per cent last year. Life insurance companies have also been hard hit during these two periods. In the 1966 crunch savings growth dropped 11 per cent, and in 1969 it fell by 20 per cent. The difficulties which life companies have been having during each credit squeeze have been largely a result of an increase in policy loans. Over the longer run, however, the share of total savings which life companies and savings

ļ

ł

### THE IMPACT OF INFLATION

banks have received has been declining. In 1947 and 1948, for example, life insurance companies received over 50 per cent of the total institutional savings. Today, on the other hand, the share has dropped to about 22 per cent. Similarly, savings and loan institutions' share has dropped from 30–35 per cent in the late 1950's to 18 per cent in 1969.

Part of the reason for these trends lies in the growing importance of pension funds as a means of providing for future security. Another significant factor seems to be the growing realization that inflation is a continuing problem—together with the attempt to hedge against it by investing in equities and institutions which participate in equity investments. This, to a large extent, explains the growth in the popularity of mutual funds and the fact that their share of savings growth has increased from 2.5 per cent in 1950 to 10 per cent in 1969.

MR. LALANDER S. NORMAN: There may be a considerable lag before we feel the full impact of these psychological effects. As a possible indicator of the current or more immediate impact, I determined the ratio of amounts surrendered to amounts in force at the beginning of the year for the life and endowment policies of each of twenty well-established companies of substantial size for the years 1967, 1968, and 1969. The average of the ratios for these twenty companies increased from 2.26 per cent in 1967 to 2.40 per cent in 1968 and to 2.55 per cent in 1969. In other words, the 1969 rate of surrenders was 113 per cent of the 1967 rate.

This may not seem too impressive, but I would expect the rate of surrender to accelerate with continued inflation. More impressive is the fact that policy loans in United States life insurance companies increased  $2\frac{1}{2}$ billion in 1969—a 22 per cent increase in just one year.

It is disappointing enough to have to thus divert so much of the incoming dollars that we would otherwise be investing at 9 per cent and more. But, if continuing inflation should cause surrenders and loans to reach the point where we must liquidate *existing* investments at the low prices that go with the high interest rates, our problems would become severe indeed.

CHAIRMAN BEACH: One conclusion that may be drawn from the remarks of our three panelists is that the 1966 and 1969 declines in the shares of savings obtained by mutual savings banks, savings and loan associations, and life insurance companies indicate a structural inability of these institutions to adapt to unusual inflationary stresses. Let us keep this in mind as we talk further.

Let us turn now to the recent history of inflation and what the short-

term future looks like. Let me lead off by commenting that in the early 1960's it became a key element of national economic policy to restore "full employment" as it is now defined, that is, no more than a 4 per cent unemployment ratio. This was in response to a lagging growth in the GNP during the 1950's with its subsequent impact on employment.

MR. MOELLER: Where inflation is concerned, it can be safely assumed that "recent history" refers to the period since mid-1965 when the demands of the escalation in Vietnam were superimposed upon domestic demand and the economy began to overheat as a result. A brief review of economic and financial developments since 1965 is important to understand the nature of the inflationary imbalances which currently exist.

Much of the problem can be attributed to the lack of co-ordination of monetary and fiscal policies for an extended period. Throughout 1969 and 1970, however, they have complemented each other.

In 1965, the economy was approaching full employment, stimulated by the tax cut of the previous year. In the summer of 1965, the decision was made by the United States to escalate the involvement in Vietnam. Economic activity accelerated, stimulated not only by rising defense spending but also by a coincident capital spending and inventory boom. The proposed budget for the fiscal year ending mid-1967 was expansionary, so the main burden to restrain what was becoming an overheated economy was left to monetary policy. The latter was worked so hard that a "credit crunch" developed in mid-1966.

In order to alleviate tight credit markets, a restraining fiscal policy was called for, that is, higher taxes and lower government expenditures. This would have relieved the burden on monetary policy and permitted lower interest rates. However, the restrictive monetary policy continued without significant support via fiscal restraints, and that led to severe distortions among the various sectors of the economy. Only one major fiscal action, a sixteen month suspension of the investment tax credit, was developed by the administration and enacted by Congress in October, 1966. As inflationary forces mounted, wage-price guidelines, which were meant to help contain them, became increasingly disregarded.

The subsequent reversal of monetary policy from restraint to ease was in retrospect sharper than required. Largely on account of the stringent credit conditions which had existed in the summer and fall of 1966 and lower inventory accumulation, the economy leveled off in the first quarter of 1967. This slowup in economic activity, which lessened the demand for funds, together with the relaxation of monetary policy resulted in a drop

### D40

ł

in interest rates in the first half of the year. Under these circumstances, fiscal policy was also relaxed by restoring the investment tax credit in April. Monetary policy continued to ease.

About mid-year, a renewed demand for funds by both business and government forced interest rates up sharply. By the end of 1967, longterm interest rates were at new record levels, and consumer prices were increasing 3 per cent above the previous year. As an inflationary psychology was taking hold, new and more serious imbalances were beginning to appear.

The pressures on wage levels in 1967 were varied and comparatively strong. Wage demands to cover the accelerated price rise in 1966 were a focal point in collective bargaining on new contracts, as many important industry negotiations got under way. In addition, increases already negotiated but not yet effective added another push, as deferred increases from earlier settlements became due.

In the first quarter of 1968, price increases accelerated, running 4 per cent above a year earlier, and the expectations of further price rises were beginning to stimulate the sharp increases in capital expenditures, which took place in the third quarter. Consumer spending was also booming.

In April, 1968, the Federal Reserve discount rate was increased to a near-record  $5\frac{1}{2}$  per cent. It soon became clear to both the administration and Congress that they would have to work out a restrictive fiscal program to avert both a financial and an economic crisis. In June, Congress and the administration agreed upon a 10 per cent tax surcharge and a \$6 billion cut in planned federal spending for the fiscal year ending June, 1969.

Most economic analysts expected a slowing of the private economy as a result of these measures, as did the monetary authorities. The discount rate was lowered to  $5\frac{1}{4}$  per cent, and the money supply was increased.. In the second half of 1968, the economy showed no indication of slowing down, consumers maintained spending by cutting into their savings, and late in the year the Federal Reserve recognized the error of easing money conditions too soon. By the end of the year, interest rates had again climbed to new records and consumer prices were running more than  $4\frac{1}{4}$ per cent higher than the year earlier. Clearly the United States was in an extremely abnormal economic environment, and an inflationary psychology had taken firm hold on the economy.

For all practical purposes the current monetary stringency in the United States can be said to have started late in 1968, as fiscal and monetary policies, working hand in hand, began to reinforce each other. The central bank not only slowed over-all monetary expansion, but the restrictions proved particularly severe on the banks in large money market centers because of Federal Reserve Regulation Q, limiting the interest which can be paid on large certificates of deposit. Banks maintained their supply of loanable funds, coping with declining deposits by increasing the borrowing of dollars from foreign branches, utilizing the federal funds market, selling off securities, and borrowing at the Federal Reserve. Through its open market operations, the Federal Reserve kept bank reserves under pressure. The prime lending rate at commercial banks was raised to a new high of 7 per cent. The prime lending rate of major banks was again adjusted upward in mid-March and again in June to  $8\frac{1}{2}$  per cent.

The accelerated rate of price increase in 1969 was clearly the outstanding economic problem. High wage increases continued while productivity in the private economy remained relatively unchanged. The result has been the rapid increase in unit labor costs resulting in a profits squeeze. The lesson to be learned from the experience of recent years is that the longer inflation is allowed to run unchecked, the more difficult it is to contain.

In 1970 a decided slowing of the economy has been achieved, but the impact on inflation still remains to be seen. For the short-term future, some lessening of the rate of inflation will probably appear, but on the average we will still experience a price gain in the area of 5 per cent above that of last year.

MR. JACKSON: It might be helpful to add one or two comments from the Canadian point of view. In Canada, as you know, we have had an inflationary experience not unlike that of the United States. The reasons for this inflation include the following:

- 1. The Canadian economy is closely tied to the American economy.
- 2. In recent years there have been heavy federal deficits financed through the banking system. One of the major reasons for the heavy deficits was the cost-sharing programs with the provincial governments covering such things as Medicare, hospital construction, and university building construction.
- 3. High wage demands looking for equality with the United States. Two in this regard are worth mentioning. The first was in 1966 when, to ensure that Expo '67 would be ready, the government allowed a 30 per cent wage increase for lock workers on the Seaway to give them equality with the United States. This was regarded as a government-approved settlement, and its effects spread through the economy. The second relates to the automobile industry. With the integration of Canadian and United States automobile production, the UAW is pressing hard for equality of wage rates.

As to the short-term future, the present Canadian policies of restraint have been operative for about a year. There is still strong resolve politically to cure inflation—stronger, I believe, than in the United States and thus there is a likelihood of continued slow growth and progressive easing of inflation.

An interesting experiment is the Prices and Incomes Commission established by the federal government. The Commission persuaded the leaders of two hundred and fifty of the largest Canadian businesses to agree that for the balance of 1969 any price increases they made would be less than their cost increases. It is rather early to say how effective the Commission will be, but it has already forced several companies to withdraw price increases.

MR. MOELLER: The trend toward the sale of mutual funds and equitybased insurance products will no doubt continue. In this context, the future of permanent cash-value life insurance will, of course, be different if equity products were not a factor, but the role of permanent insurance will be no less important and no less successful.

It must be borne in mind that there is a need for both of these kinds of instruments. Each is undertaken for different motives and to satisfy different needs of an individual and his family. Equity investment is usually undertaken with the hope of future gain in the form of either income or capital appreciation or both. Insurance, on the other hand, is designed primarily as a means of protection against possible adverse happenings in the future. This is achieved by creating an immediate estate and by providing a ready source of funds for emergency use and other contingencies.

Unlike any type of equity investment, whether a direct investment in common stocks or indirect investment through mutual funds, cash-value permanent life insurance is the only program that offers an individual complete certainty as to achievement of goals, safety of principal, and flexibility while earning a reasonable rate of return. Cash-value life insurance guarantees that an investment goal will be realized whether the investor lives or dies. As soon as the first premium is paid, coverage becomes effective for the full value of the policy, and this remains unchanged, as do the premiums, for the duration of the policy life. Investment in equities, on the other hand, carries no guarantees of any kind.

Life insurance satisfies what, for most families and individuals, is the more basic need. In a word, equity products and equity-based insurance products have nothing to fear from permanent cash-value life insurance, and it has nothing to fear from them. MR. JACK T. KVERNLAND: There is certainly solid evidence of the trend toward mutual fund sales. With equity-based insurance, we come to a more speculative area. There is virtually no equity life insurance on the market in the United States as yet. There are, of course, variable annuities, although the individual variety is fairly recent. Most of the variable annuity sales have been in the qualified markets, and I suspect that this will continue to be the case.

I might mention one other product which has had some market exposure in this country—the equity funding plan. Under these plans the consumer buys mutual fund shares. The shares are then pledged for a loan to pay insurance premiums, typically on a permanent plan. With the bank loans more or less offsetting the cash values, the purchaser's net equity is in mutual fund shares, but he has the security of the insurance coverage. This is a somewhat specialized means of avoiding the accumulation of fixed-dollar cash values as a consequence of buying permanent life insurance. The plans are complex, usually backed by a fairly sophisticated computer program, and they are aimed almost exclusively at the high-income buyer. There is really nothing yet in the market place in this country to give us hard information on the appeal of variable life insurance.

The situation is somewhat different in Great Britain, where insurance programs tied to mutual fund shares have been on the market for about four years. In 1969 almost 25 per cent of new premiums for life insurance were for these unit-linked contracts, up from about 15 per cent in the preceding year. These policies have been most successful in the 20-30 age group and for people over 60. How much significance for the United States this British experience may have is uncertain.

With mutual funds we have a much clearer picture. There are, however, some important distinctions which we need to make between mutual funds and equity-based insurance products. There are differences in the buyers and in the buying motivations. To begin with, life insurance is typically sold to younger age groups than are mutual funds. We think of the prime life insurance markets in the twenties and early thirties. Mutual funds seem to be most successful in the age ranges of the forties and fifties. The typical life insurance sale is aimed, at least superficially, at the desire to be a good provider, a more or less selfless motive. The appeal of a mutual fund sale is the desire to make money. Certainly, the insurance salesman draws on the savings and other personal benefits of insurance ownership, but I think there is a real difference in the basic motives which life insurance and mutual fund sales appeal to.

These considerations lead to several conclusions. First, while inflation

i

may spur mutual fund sales, much of the motivation for preferring mutual funds to other media for savings comes from a different source. That source is the desire to participate in the growth of the American economythe urge for a piece of the action. I think this motivation is largely independent of inflation, and it is dangerous to regard mutual fund sales success as being largely inflation-dependent. Even if inflation psychology goes away, mutual fund sales will not. Second, I think we frequently overstate the degree to which mutual funds and life insurance are in competition. They appeal primarily to differing buying groups and differing consumer desires. The competition is not so much between different media for satisfying the same desires as it is for application of the limited consumer dollars to the satisfaction of one or the other of these desires. Mutual funds have hurt us not because they are a medium which competes directly with our fundamental product but because they have soaked up dollars which might otherwise have gone into our products. There is, incidentally, an important implication here for the marketing process. One writer on this subject summed it up by saying that the life insurance sale is a needs sale and the mutual fund sale is a greed sale. The life insurance salesman prospects for needs which his product can satisfy; the mutual fund salesman prospects for dollars which his product can multiply.

I recognize that this distinction between the appeals of mutual funds and the appeals of life insurance can be overdrawn. For example, the "buy term and invest the difference" pitch hits both the good provider motive and the desire for a piece of the action. The distinction is nevertheless a significant one which we should keep in mind.

In this context, how do you value the future of permanent cash-value life insurance? As I indicated, I think the equity funding plans will have relatively little over-all impact, although they will be significant in the top markets. In these markets they are chewing into the cash-value sales which have survived "buy term and invest the difference." I think they are also a harbinger of consumer interest.

On the mutual fund side, everything that I have seen points to continued growth. Rising incomes will generate more discretionary dollars, and people will want to put many of these dollars where the action is. As long as that means mutual funds for the average buyer, I believe he is going to continue putting more and more money there.

CHAIRMAN BEACH: The development of equity products may appear to indicate that we have started to adapt to inflation rather than to continue our fight against it as a matter of influencing national policy. I think

nothing could be further from the truth. It is obvious, however, that we must continue to innovate and adapt in order not only to service our present clients better but to enhance our capability of attracting more customers. This is a primary function of business.

MR. JACKSON: I would like to begin my remarks by commenting briefly on how companies have responded to continued inflation in the United Kingdom and Canada.

In the United Kingdom, insurance companies have invested heavily in common stocks. Some companies have as much as 50 per cent of their assets in common stocks, so the reserves of conventional insurance policies have a high equity element. Yet, as Jack Kvernland mentioned, 25 per cent of new premium income last year went into equity-linked products. Why is this? One reason is that English companies have been understandably reluctant to increase dividends substantially on the basis of unrealized capital gains. A second factor, and one which I think is significant in all countries where insurance is sold, is that the public has not understood what happens to the premium dollar that is invested in conventional insurance policies.

In Canada, equity-linked life insurance has made less an impact than it has in many European countries. This is not, however, because conventional life insurance has been thriving. On the contrary, for the past six months in Canada the trend of ordinary sales has been down. The reason, I think, is that three adverse factors coming closely together have had a bad psychological effect on the agency forces of companies in Canada. These three factors are (a) an increasing consciousness of inflation, (b) the new tax laws affecting life insurance, and (c) the restrictions regarding sale of "executive" pension plans.

In general terms, those companies in Canada which have introduced equity-based life insurance products have shown better sales than those which have not.

Life insurance products generally provide a combination of protection and savings; I would like to look at protection and savings functions separately. If a man's need for insurance were always constant, in times of inflation his need for protection could be met by a policy where the amount of insurance increased with a cost-of-living index. A man's need for protection, however, varies according to his age, his earnings, the number and age of his dependents, and other factors. Viewed in this light, inflation is just one more variable, and I cannot see the sense in designing complicated policies—such as term insurance increasing according to the

### D46

cost-of-living index—merely to satisfy one of the variables. If it were not for the question of insurability, one could argue that a person should review his insurance program periodically and buy the protection he needs. If a policy with increasing protection is needed, a policy increasing by a given percentage, say, 3 per cent per annum, would fit in just as well in the over-all planning of a man's needs. Such a policy would be easier for the company to administer and for the insured to keep track of his amount of protection; on the other hand, at the moment it might not have quite the psychological attraction as a cost-of-living policy.

The other part of the insurance product is the savings element. How can we best meet this need in a period of continuing inflation? In times of inflation, as discussed under question 3, people become disenchanted with bonds and turn to common stocks. If this trend continues, common stocks relative to other investment media eventually become overpriced. The major disadvantage of mutual funds in most equity-based contracts is that they are by definition primarily wedded to common stocks, whether or not stocks are a good investment at the moment.

Surely a good investment officer is one who looks at the whole range of investments—stocks, bonds, mortgages, real estate, and so forth, and invests in whichever type security represents the best relative value at the moment. Unfortunately, investment officers of North American insurance companies are quite restricted in their choice of investments because of insurance laws. Perhaps in the United States we should be putting some of our efforts into getting insurance regulations relaxed in the area of investments, nonforfeiture laws, and reserves rather than putting all our efforts into getting reasonable SEC regulations.

If we need an alternative to conventional policies—and I think we do one possibility is to have variable policies where the investment is in a "balanced fund" rather than an equity fund. A balanced fund might include mortgages, bonds, stocks, and perhaps real estate, the proportion to be varied as their relative attractiveness varies.

Another idea used by a number of Canadian companies is to have a dividend option which calls for the dividends to be used to purchase units in a separate account. This allows the policyholder to increase the common stock portion of his savings element. For a policy twenty years or so in force the common stock proportion is quite high. Unfortunately, the proportion in the early years is very small.

MR. KVERNLAND: Why should the mutual funds be granted exclusive occupancy of the action area? It seems clear to me that an important part of our future lies in the area of variable insurance products, and I do not

believe that inflation is the only reason. We have all experienced the growing reluctance of insurance buyers to accumulate fixed-dollar cash values as a consequence of satisfying their death protection needs. I think this reluctance stems partly from inflation but partly also from the desire to participate in economic growth. Variable insurance products offer an answer to both of these consumer interests. I suggest, however, that we should go further than the mutual funds. I think it is perfectly reasonable for insurance companies which feel it appropriate to their operations to enter the mutual fund field.

But that is just playing in the other fellow's ballpark. We have the opportunity to provide equity insurance products with guarantees. The essence of our business has always been guarantees. In the past we have couched those guarantees in terms of fixed dollars, but something more is needed today. Specifically, we need insurance products providing benefits which move with inflation and with the growth of the economy but which at the same time provide minimum guarantees on death or surrender. I believe that this kind of coverage maintains our basic and unique role of providing guarantees and gives us the tool to meet inflation and to compete for the consumer dollars with mutual funds and equity funding plans. The technology is already well along in development—the papers presented to the Society by Frank Di Paolo and Sam Turner last fall are good examples, and I know there are other developments in the works.

I have talked principally about products in the traditional vein without getting into the question of "services." I think there is a lot which can be done in expanding the breadth of the financial services which we provide, but rather than prolong my remarks I will leave that to other discussions. I regard the basic insurance product as the critical ingredient around which these services might be built.

MR. NORMAN: While it is desirable to develop products that can survive inflation, I would hope that this would not be carried to the point of offering products which rely on continued inflation for their effectiveness or which themselves tend to generate further inflation.

Features relating to inflation as such ought to be viewed as defensive measures only. In our free enterprise system, *reasonable price stability is a requirement of economic law and order* but often gets sacrificed in our zeal for other goals. Defensive measures become advisable, if not necessary, to preserve business and to maintain sales. The guaranteed purchase option has some value in countering the inflation objection of a prospect. Variations of the guaranteed insurability concept might be developed to relate directly to increases in a price index.

### D48

i

I

In the consideration of adjustment options, the emphasis should be on *flexibility* rather than on trying to outguess the future. At the same time, the need for simplicity suggests that we not try to do everything in one contract.

We should also take note of the extent to which many people are already hedged against inflation through such things as their personal earning power, home ownership (plus other property), social security being adjusted from time to time as wage levels change, and group insurance schedules being similarly upgraded, in many cases automatically, in keeping with wage changes. These things help but should not cause us to understimate the seriousness of the inflation problem or to lose our resolve to do all possible to quell it.

Agent compensation is affected by continued inflation in five principal ways:

- 1. The amounts of insurance sold.
- 2. Changes in the product mix.
- 3. The agent's expenses.
- 4. Depreciation in the purchasing power of the deferred portion of his income, as represented by renewal commissions, service fees, and retirement plan credits.
- 5. Loss of renewals due to increased terminations.

As the cost of living increases, larger amounts of insurance are needed. This is reflected both in larger average-size policies and in some additional sales to update existing programs. Both in our company and in the average of twenty other companies with whom we routinely compare, the average-size policy issued has increased 27 per cent over the past four years, a period during which the over-all consumer price index increased 16 per cent.

Changes in the product mix have been of two main kinds: an increasing proportion of term insurance and the move into equity products. If a field man sells term in lieu of cash-value life insurance, his compensation is likely to be much reduced. If he also sells the investment of only the difference in premiums, his compensation will still be short. He must sell additional investment, corresponding to what might otherwise be sold by mutual fund or other equity salesmen. We have already seen that some will succeed and some will not, while some will remain dedicated to cashvalue life insurance.

The agent's own business expenses tend to increase in proportion to inflation, but may be additionally increased by the excessive service demands that are generated by unstable conditions.

Inflation causes the deferred portion of agent compensation to lose purchasing power in the same manner as other fixed-dollar incomes. In this regard, his interest in a stable dollar is the same as that of all members of the general population who do any saving.

However, when inflation becomes sufficient to destroy confidence in cash values, terminations increase, so that, besides the loss of purchasing power of each dollar, the agent loses actual dollars of income that would have continued under stable price conditions.

In spite of such effects, increased sales in recent years have enabled agents to preserve their relative income position. From 1965 to 1969, while the consumer price index increased 16 per cent and the index for services only increased 22 per cent, the average earnings per man for established agents in our company increased 26 per cent. The moderate improvement in relative position is probably due to factors other than inflation.

Furthermore, we have not yet felt the full impact of the change from creeping inflation to the marked inflation of the last couple of years. If inflation should continue at such a magnitude, the ultimate effect on agent compensation would be disastrous, in my opinion. Marked inflation can too easily lead to runaway inflation, which, among other things, would completely destroy cash-value life insurance, as happened in the past in France and elsewhere.

In short, the economic impact of inflation eventually becomes ruinous, to a life insurance agent as to most of the population. There is need to demand and support fiscal policy that will slow inflation completely.

MR. KVERNLAND: I might mention one other effect of inflation on agent compensation which affects some of us. For companies with unionized agents, inflation generates extremely heavy pressure for compensation increases beyond productivity increases. These pressures focus to some extent on depreciation of purchase power of deferred renewal compensation and loss of renewals due to increased terminations. Quite frequently the arguments rest on the simple proposition that the agents need more money in order to maintain their standard of living in the face of continuing inflation. I certainly do not envy any company which faces renegotiation of a contract with its agents this year.

MR. MOELLER: Regardless of whether one completely endorses the tenets of the monetarist school of thought, the resurgence of monetary theory has served the very useful purpose of once again focusing attention on the direct relationships between prices, price expectations, and interest

## D50

1

i

1

rates. I say this once again because the ideas are not original to the present generation, having been expressed by John Stuart Mill in the mid-1800's and Irving Fisher as early as the turn of the present century.

While some of the newer Keynesian-oriented economic models recognize the relationship between interest rates and inflation, most of the earlier Keynesian and neo-Keynesian models put greater emphasis on saving and investment relationships and the supply and demand for money as the determinants of interest rates. Saving was generally assumed to be plentiful, and investment was a function of income and innovational need. Demand for money varied directly with income and inversely with interest rates. Supply of money was essentially a function of monetary policy. Under such a system an increase in the supply of money was expected to result in a decrease in interest rates. Events of World War II and its aftermath tended to reinforce this principle. In the face of rapid monetary expansion to finance World War II, interest rates reached their low point in 1946 and continued to stay low even into the early fifties. In retrospect the "accord" between the Treasury and the Federal Reserve artificially to peg interest rates at low levels was the cause of this situation rather than easy money per se. Nevertheless, it unfortunately reinforced the idea of easy money creating lower interest rates.

In contrast, experience of the past decade seems to support some of Irving Fisher's earlier conclusions that interest rates vary directly with prices, although with a lag. Consumer prices increased at a compound annual rate of 1.2 per cent between 1960 and 1964. Over the same period bond yields were relatively stable. Long-term governments, for example, averaged only 13 basis points higher in 1964 than in 1960, and Moody's corporate bond composite was 16 basis points lower.

Between 1964 and 1969, consumer prices increased at a compound annual rate of 3.8 per cent, with prices showing an accelerating trend throughout. The 1969 gain came to 5.4 per cent, and current year-to-year changes are currently running in excess of 6 per cent. Over this period of rapidly rising prices long-term government bond yields increased about 65 per cent and corporates 82 per cent, thereby incorporating some but not all of the increased pace of inflation. In addition to high rates, many debt issues have included conversion features, stock purchase warrants, or other forms of equity participation. Many of the latter are being obtained by financial institutions as they seek to remain effective competitors for savings funds. Individual investors, however, are also becoming increasingly aware of the losses suffered in inflationary periods, and this has contributed to the present problems of disintermediation. They have

learned to invest directly in corporate bonds, government agency issues, short-term securities such as treasury bills and equities. It is not surprising, therefore, that a study recently published by the Federal Reserve Bank of Saint Louis found that "the total effect of price expectations on interest rates and the speed at which they are found appear to have increased greatly."

So far most of the analysis has been from the lenders' point of view. It should be pointed out, however, that borrowers are willing to pay such rates when they feel that the market values of the capital assets which they usually purchase with these funds would also rise along with prices in general. This helps to explain in part, the persistent increase in business capital spending in the face of rising interest rates and a relatively sluggish corporate profits picture.

While the incorporation of a sizable inflation factor in the United States interest rate structure is a relatively new experience, this phenomenon is by no means new in other parts of the world. While all of the forces governing the demand and supply of loanable funds cannot be isolated, one way in which the inflationary influence has been demonstrated in the past has been to compare interest rate levels in countries that traditionally had relatively low rates of inflation with those nations, such as these in South America, that had high rates of inflation and high interest rate levels. Unfortunately, we no longer have to look beyond our own borders to prove this point.

Barring a rapid shift in expectations regarding inflation, which present economic forecasts and surveys do not anticipate, and considering the increasing sophistication and education of our population, there seems little doubt that interest rates will include not only the nominal risk-free charge for the provision of funds and a return reflecting the risk factor on a particular loan or debt instrument but will also continue to include a liberal allowance for price inflation.

MR. NORMAN: Typically about two-thirds of the expenses of a life insurance company relate to the acquisition of new business, including the development of new manpower. Therefore, we might say that the inflation problem applies principally to only about one-third of our expenses on average, assuming that the current initial expense levels are adequately reflected in the pricing of the policies.

Other things being equal, unit costs on a per policy basis increase in proportion to the price and wage increases that characterize inflation, but the increases in average-size policy brought on by inflation and the corresponding increases in average premium per policy have tended to prevent

### D52

increases in unit costs per \$1,000 of insurance and per dollar of income. In our company, per policy unit costs have increased 15–20 per cent in the last five years and 40 per cent in the last ten years, but administrative costs per \$1,000 are down 10 per cent in the last five years and 20 per cent in the last ten years.

In recognition of the increase in per policy costs, many companies have increased their policy fee charges. For policies issued after January 1, 1970, AUL increased its policy fee from \$8.00 to \$12.00.

For United States life companies the ratio of operating expenses to total income has been rather steady (17 per cent) the last several years, down from a peak of 17.9 per cent in 1958.

Leafing through the Unique Manual reports for larger, well-established companies, the ratio of expenses to premiums is typically steady (no up or down trend) in the past several years (1964–68), while insurance expenses less principal acquisition costs per \$1,000 insurance in force typically trend downward about 1 per cent per year.

In the past several years we have witnessed the phenomenon of interest rates continuing to increase beyond all expectations that would have been considered reasonable a few years earlier. The expectation of further inflation has been the principal force causing the higher interest rates. A fortunate effect of this, from the standpoint of a life insurance company's ability to meet its dollar obligations under long-term contracts, is that unanticipated excess investment income has far exceeded unanticipated excess expenses brought on by inflation.

Considering various kinds of policies, we have at one extreme shortterm coverages in which the expenses can be adequately anticipated and charged for in the premium because they are near at hand.

At the other extreme we have whole life insurance. Here it can readily be shown that an increase of, say, 10 per cent in maintenance expense would be offset by a very small increase in net investment earnings.

If we take an average policy in force, with reserve of, say, \$150 per \$1,000 of face amount, the annual increment available for new investment (consisting of the increase in reserve plus the roll-over of previous investments) will be something like \$20 per \$1,000 of insurance, or an amount on the order of 13 per cent of assets. If this \$20 can be invested at a net yield just 1 per cent greater than the average net return that was anticipated when the premium rate was first set, it will generate extra income of 20 cents per \$1,000, which is \$1.00 extra on a \$5,000 policy or \$2,00 extra on a \$10,000 policy.

Because of this tendency of interest rates to increase during periods of inflation, we have considered it unnecessary to build specific provision for

*future* inflation of operating costs into our gross premium for life insurance. Sufficient conservatism may be provided by the use of interest assumptions that reflect some reduction in future years.

When we come to the pricing and projecting of financial results on equity products, where all changes in investment results are passed along to the insured or annuitant, it may be prudent to project some increase in the future per-contract costs.

Finally, we may observe that one other effect of inflation is to aggravate the problems of surplus strain associated with new business, not only because of the enlarged needs for new insurance but also because of the high cost of developing new products and services to meet the changing needs and desires of the public.

## D54

1