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VARIABLE ANNUITIES AND MUTUAL FUNDS

1. Compare variable annuities and mutual funds from the viewpoint of both the issuing company and the contractholder, with respect to
   a) Taxes,
   b) Profits,
   c) Mortality and expense risks,
   d) Laws and government regulations.

Philadelphia Regional Meeting

CHAIRMAN ROBERT M. DUNCAN: Perhaps no insurance innovation in recent years has generated so much discussion as variable annuities, and the discussion has been both pro and con.

In a book by Dickens, *David Copperfield*, there is a passage which reads: "Annual income, 20 £. Annual expenditures, 19.6. Result, happiness. Annual income, 20 £. Annual expenditures, 20 £., ought and six. Result, misery."

The particular impetus for developing variable annuities in this country came from an irregular but persistent inflation in our economy that became increasingly visible at the time of and after World War II. How to preserve purchasing power after retirement was the primary need, and this was expanded later to how to keep pace with the ever increasing standard of living after a man's working years are over. An equity-based program may be the answer. It is certainly a live subject, and many new ideas are emerging every month.

We are therefore fortunate to have with us today a most capable panel to explore some of these questions.

MR. LOREN G. LOGAN: This is a rich topic. There is ample room for discussion. Perhaps I can speak more easily on it, since my organization sponsors no mutual fund as yet, nor do we offer individual variable annuities. For some time we have had available a group variable annuity for qualified corporate programs, relying on the usual exemptions from the security acts. Recently we have made effective registrations of group contracts for TSA and H.R. 10, but we have not entered the individual market, which I believe our topic primarily refers to.

First of all, let us talk about the customer's taxes—mutual fund vs. individual variable. A tax comparison of mutual funds and individual variable annuities reminds me of a horse race. Right at the gate, mutual funds

get off to a fast start, since no premium taxes are payable on payments made. Premium taxes seem a permanent burden on saving via variable annuities, though the taxes may be deferred under the deposit administration type of contract and are sometimes waived in qualified situations.

Next comes the build-up period—the variable annuity does better here. The variable customer is tax-free as long as he lets his contract accumulate. The holder of mutual funds must pay income tax at his personal rate on all dividend and interest income to his shares as received and passed on by the fund. Realized capital gains are also normally distributed and currently taxed to him, and unrealized appreciation in mutual funds may be less important. A variable annuity seems a natural for an individual in a high personal-income-tax bracket during his working years.

At payout age, the situation is various. In a lump-sum settlement, the holder of the mutual funds is able to enjoy long-term capital gains treatment of any unrealized appreciation, assuming the mutual fund managers have left any in the store. The variable annuity does not show up so well; long-term capital gains treatment is not available, and unrealized appreciation is taxed as ordinary income in a lump-sum settlement, albeit with certain provisos for spreading the gains.

In the home stretch, after retirement, the variable annuity has the best chance to prove its worth. The recipient after retirement enjoys the usual annuity tax rules. Under the nonqualified variable annuity, his investment is, of course, spread over the life of the annuity. Here the annuity principle goes to work, and the lifetime character of the benefit has something which the mutual fund cannot offer. Ultimately, this may not be a tax matter at all from the consumer's standpoint; he may make a choice based on his expected needs after retirement rather than on taxes.

It is hard to compare the two products after retirement, but arithmetical comparisons are easily made during the build-up period. I have made a twenty-year comparison, starting at age 45, between a hypothetical mutual fund and a nonqualified variable annuity, and on my assumptions the tax advantage is clearly with the variable annuity. I assumed that the holder is in a 35 per cent tax bracket and that each investment earns 3 per cent annually from dividend income and 5 per cent more from total capital appreciation, realized and unrealized. In each case, the expense margin was assumed to be a level $8\frac{1}{2}$ per cent of the net investment, with the variable annuity loading covering premium taxes, if any. An investment advisory fee of $\frac{1}{2}$ per cent was used in each case. No "mortality" charge was made. The insurance fund was assumed to realize an accumulated unrealized capital appreciation at 10 per cent per year and the mutual fund at 20 per cent per year. This difference is in accord with the

December, 1966, SEC report on mutual funds; mutual fund turnover in 1965 was nearly twice that quoted for life company stock portfolios. Notice that the higher mutual fund turnover was not credited with any increase in capital gain rate. It was found that, if $1,000 per year were invested in each medium, with net investment income after taxes reinvested, the value at 65 before distribution taxes would be $36,972 for the mutual fund and $40,445 for the variable annuity.

With regard to taxes on the issuing company, with the single exception of capital gains, taxes on investment income during the build-up period are much the same on a life insurance company separate account and on a mutual fund with the usual Subchapter M qualification. All regular investment income is normally "passed through" without tax. The mutual funds have some advantage on realized capital gains; these are taxed to the individual shareholders, who may pay the lesser of 25 per cent of all gain or their personal tax rate on one-half of it. The nonqualified variable annuity fund is subject to a flat 25 per cent on realized long-term capital gains. It would seem advantageous during the build-up period for nonqualified variable annuity reserves to be invested in equities which may be held over long periods of time. Incidentally, there may be significant income tax advantages to the insurer in strengthening the reserve basis in the separate account with surplus funds, where it can be justified.

A comparison of taxes on operating gains is difficult to make. For one thing, it would depend on the corporate structure of the mutual fund. Is the insurer itself the management company, or has it organized a subsidiary to perform this function, or are both owned by a holding company? The subsidiary's tax position would be that of any corporation—net profits would be taxed at the usual 48 per cent, with dividends passed on to the parent then being taxed to the parent as dividends received. This last tax may be avoided in certain circumstances through a consolidated return. On the other hand, if the insurer itself is furnishing all the services of the mutual fund manager, gains from this operation would seem to be taxable as "unrelated business income." Other underwriting gains on variable annuities would presumably be transferred to the regular assets of the insurance company, and the normal operating gains tax climate would apply.

A comparison of profits between mutual funds and variable annuities should proceed by taking a look at each source of profit. The first possible source is the loading charge made. For normal-sized fund purchases, a common loading is $8\frac{1}{2}$ per cent of the net value of the shares purchased or 9.3 per cent of the gross amount paid. It is the practice in the mutual fund field for the front-end load to be largely expended in distribution costs,

and sales competition seems likely to keep it this way. The distribution function is commonly assumed by the management company. The SEC report finds that, for ten adviser-underwriters with published data, the median profit recently on distribution margins was only 8.7 per cent, while the median profit for the investment advisory operation was 45.6 per cent of income. Since the SEC is pressing for a reduction of the maximum load to 5 per cent, it is difficult to picture any future trend under which more of the front-end load might be retained by underwriters. Life companies would no doubt have the same cost picture in distributing their own mutual funds. (I can quote Mr. Cohen himself on loadings; he reported last month that, of seventeen life companies offering or planning to offer fund shares, twelve expected to use a load of 8.5 per cent of net.)

The loading under variable annuity contracts seems to offer a better chance for profit because only one sales effort is needed. Prospectuses for variable annuities have stated openly that the load is for administrative expenses and profits as well as for distribution costs. The commission structures of variable annuities indicate that the insurer anticipates a recovery from loading in later years. For example, asset share projections for tax-sheltered group variable annuities of a typical stock insurer indicate that, including loading gains, the block of business will become profitable after seven years. If commissions after the tenth year are reduced or eliminated, variable annuity loads could become a source of appreciable surplus, if we assume that future expense levels are as anticipated. These expectations may be subject to competitive pressures to return part of the gains through dividends or experience-rating returns.

Mutual funds and variable annuities seem to be in a somewhat different position as far as investment advisory fees are concerned. The mutual funds have been brought, through regulatory pressure and litigation, to lower some larger charges. The SEC proposes to require by law that such fees be "reasonable," generally interpreted to mean not over $\frac{1}{2}$ per cent. Certain insurers of group individual variable annuities have investment deductions substantially more than $\frac{1}{2}$ per cent, and such arrangements would seem attractive from the stockholders' standpoint, although it remains to be seen whether they will continue over the long term with regulatory and competitive pressures. Other current insurers of variable annuities have a more modest advisory fee plus a second charge for the mortality and other guarantees provided in the variable annuity. This additional charge may be 1 per cent of current asset values each year. These provisions would seem to be generous unless the mortality features are markedly more favorable than they are in contracts of companies without such charges.

The life companies currently sponsoring variable annuity products on the market show in their prospectuses quite a range of charges against assets (see accompanying tabulation). Figures apply in some cases to group products, with ordinary products carrying higher charges.

No. Companies	Investment Advisory Fees	Charge for Guarantees	Total Charge
4*........	0.500	....	0.500
1.........	1.000	....	1.000
1.........	1.140	....	1.140
1.........	0.323	1.002	1.325
2.........	0.325	1.000	1.325
4.........	1.440	....	1.440
1.........	1.000	0.500	1.500

* One company indicates rate will decrease as fund grows. A second company has indicated a different split on its TSA product—$\frac{1}{4}$ per cent for investment and $\frac{1}{4}$ per cent for guarantees.

For comparison, the SEC has published the following 1965 figures with respect to the fifty-seven externally managed mutual funds with over $100 million in assets and for the eleven largest internally managed funds.

Charge	Median Expense Ratios to Assets	
	57 Externally Managed Funds	11 Internally Managed Funds
Investment advisory........	0.48	0.25
Other administrative services	0.09	0.06
Total.................	0.57	0.31

The mortality risk in the variable annuity is a dimension missing from mutual funds. An underwriter of variable annuities must clearly be cautious in assessing the mortality element, since no investment gains may be relied upon to cushion the impact of unfavorable mortality, contrasted to a conventional annuity. The fact that unexpectedly large enhancements of common stock values may increase the risk does not make it more attractive. One would expect to find mortality assumptions for current annuity benefits to be those appropriate to individual settlements, and one would further expect a generation approach to the mortality element in variable annuities maturing in subsequent decades. Such is indeed the case. If these projections prove to be conservative, mortality gains may be a factor in the future.

Mutual funds would seem to be well hedged against any risk from expense guarantees. Administrative services are usually provided by the management company, which is compensated through the management fees. It is not customary to make any guarantee as to the maximum on fees, and, should expense trends warrant and regulation allow, it may be assumed that such fees would be increased if necessary. Insurance companies sponsoring mutual funds will presumably follow the industry pattern.

However, life insurance companies have often guaranteed expense ratios with respect to annual variable annuity contributions if continued to retirement at the initial level. This may be compared to a level-premium fixed-value retirement annuity contract. In some cases, the insurer has also limited the advisory fee with respect to all future contributions for contracts currently issued. The insurers do have access to relief through loading margins which may not be required later on for commissions. Of course, the great imponderable in this field is the costs of future regulation at the state and federal level as it develops. Current trends are not very cheerful.

Before we leave the subject of profits, let me convey a warning to you from my mutual fund friends. We tend to think of life insurance as being uniquely competitive. They tell me that the mutual fund field is tough, too. The shibboleth here is *performance*—and this means current performance. If you do not compare well in this, you are in bad trouble.

The comparison of the regulatory climate of mutual funds and variable annuities is a painful subject. The funds are strictly regulated, true, but the primary regulation is on a federal level and is done by a single organization—the Securities and Exchange Commission. Moreover, the Commission has been doing the same job for a generation, and everyone knows fairly well what to expect. The guidelines are strict but familiar. The funds have their troubles at the state level, with the Blue Sky laws. States with reputations for strictness include Wisconsin, Texas, and Ohio. Front-end-loaded contractual plans are prohibited in California, Illinois, Wisconsin, and perhaps Ohio. Incidentally, the security people of these states may or may not object to higher first-year surrender charges in variable annuities.

The regulation of variable annuities is chaotic. There is a completely dual regulatory structure—the SEC and the fifty state insurance departments. Blue Sky laws in many states may also apply to these contracts. To make matters worse, the regulators by and large are not too conversant with the product being regulated, which makes for slow, cautious reviews and more risk of misjudgment. As for qualified variable annuities

of various kinds, there is even another layer of federal regulation, since the Internal Revenue Service has considerable control over the product. And, in some ways, the marketing of the variable product brings about more regulatory trouble than the product itself. The variable annuity is still a seriously overregulated item, and the operation of a mutual fund by a life company should be simpler. One hope for the variable annuity is that the life insurance associations' current requests to the SEC for lightening of the regulatory burden on qualified types will be successful.

In summation, it can be said that for mutual funds the tax situation is not especially favorable, but the market is well established, the profit outlook is fair, and the regulatory environment is endurable. Variable annuities have a special tax position and attractive profit possibilities, but governmental difficulties prejudice a market already something of a question.

Los Angeles Regional Meeting

MR. DANIEL F. McGINN: Variable annuities can be defined as annuities that provide periodic payments that vary according to some index. My comments will be restricted, however, to a comparison of an equity-based variable annuity issued by an insurance company and shares sold representing ownership in a typical mutual fund.

I. TAXES

A. *Contractholder's Viewpoint: Federal and State Taxation*

Essentially, if variable annuities or mutual fund shares are used as the vehicle for accumulating values under qualified pension or profit-sharing plans, the tax status of the contractholder is identical, that is, all tax on the investment income and on capital appreciation is deferred until there is an actual distribution in the form of benefits. Also, the taxability upon distribution is treated in the same manner under both funding mediums.

If a qualified pension or profit-sharing plan is not involved, there is distinctly different treatment afforded the individual under each investment medium.

1. *Mutual funds.*—All investment income and short-term realized capital gains which are distributed to shareholders—whether in the form of cash or additional mutual fund shares—are taxable as ordinary income in the year of the distribution. Realized long-term capital gains which are distributed to the shareholders as gains are taxable at the regular tax rate of 25 per cent. Consequently, for individuals who are in a high tax bracket, the resulting ordinary income tax can be significant.

2. *Variable annuities.*—All investment income and realized capital gains automatically adjust the accumulation values of the variable annuity, and no tax is incurred by the contractholder until the annuity commences or values are distributed. Consequently, the contractholder has an opportunity to defer taxation during the period when ordinary income taxes are highest and to pay taxes—upon retirement—when his tax bracket is usually at the lowest level.

In regard to the so-called tax-sheltered annuities, variable annuities with lifetime guarantees of mortality can be issued to public school employees or employees of tax-exempt organizations to allow such employees the special tax deferrals available under the IRC. Such employees cannot obtain this special tax treatment via mutual fund investments because such investments are not in "annuities."

B. *Issuing Company's Viewpoint*

1. *Mutual funds.*—These funds are not ordinarily taxed under federal and state income tax codes if at least 90 per cent of their investment income and realized capital gains are distributed to the shareholders. There is no distinction made with respect to whether or not the invested funds are attributable to qualified pension or profit-sharing plans.

2. *Variable annuities.*—All investment income and realized capital gains associated with annuities issued under qualified pension or profit-sharing plans and so-called tax-sheltered annuitites are completely exempt from federal and state taxation to the extent that such investment earnings are used to adjust the values of the variable annuities. This same special treatment is afforded variable annuities issued to cover employees of public school districts and tax-exempt organizations.

However, investment earnings of variable annuity funds accumulated for annuities issued to the typical "man on the street" do not receive as favorable tax treatment. In such instances, the realized long-term capital gains are taxed in the usual manner at 25 per cent.

Premium taxes are charged on most variable annuity considerations even though a lower tax rate often applies to considerations received under pension or profit-sharing plans and TSA's in comparison with considerations paid for variable annuities issued to the "man on the street."

C. *Comment*

Since the tax treatment accorded to qualified pension and profit-sharing plans, TSA considerations, and investment earnings is different from that granted to the ordinary variable annuities, *separate investment funds and reserves must be established* for both classes of an insurance company's busi-

ness. Such distinction in investment funds is not required for mutual funds as long as 90 per cent of the investment earnings of the mutual fund is distributed to the participating shareholders.

If the true sales and administrative charges of both mutual funds and variable annuities are identical, the accumulation unit values of variable annuities purchased by a $1,000 contribution will be less than the corresponding share values obtained by a $1,000 investment in a mutual fund *if the premium tax is charged as contributions are made.* This situation can be avoided under variable annuity contracts by deferring the charge for premium tax until the variable accumulation account is converted to a variable annuity during the payout period. Currently, this approach to deferral of the premium tax is being applied to group annuity contracts but not, generally, to individual variable annuity contracts.

II. PROFITS

A. *Contractholder's Viewpoint*

In a sense, a contractholder will "profit" from investments during the accumulation period in either a mutual fund or variable annuity to the extent that the over-all investment performance of either investment medium is superior to what he could obtain either through a savings account with a bank or savings and loan association (perhaps a credit union), through cash-value life insurance, or through his own personal investments. For the short-term investment, the client would normally achieve better results by "saving" through a bank or savings and loan association, because no "sales and administration" load would have to be amortized and there would essentially be a guarantee of the principal invested. In many respects the "sales and administration" charges incurred through the purchase of cash-value life insurance also make this type of investment unattractive for the short-term investor. In regard to personal investments in securities, short-term investors may be "lucky" enough to recover their initial purchase and sales expense, but their fortune depends greatly on the vagaries of the "market."

However, for the long-term investor, mutual funds and variable annuities will probably produce significantly greater "profits" (greater investment earnings) than the other investment mediums if the past favorable experience is a reasonable indicator of future experience. However, in all likelihood, the individual will have to establish a long-term investment program and be able to endure the cyclical swings of common stock market values to achieve this goal. With the systematic investment program established under a variable annuity contract—and with the discipline of a life insurance company's normal "premium billing" practices—the goal

should be somewhat easier to achieve than it would be under the normal mutual fund investment program. Another feature of both investment mediums is the inherent diversification of securities developed by the "pooling" concept, under which the market values of securities of different industries will often move in different directions at any point in time. This diversification is generally impossible to achieve through personal investments in securities, because few people have either the funds available to purchase a reasonable variety of securities or the technical investment know-how to pick and choose the best available investment opportunities.

From the viewpoint of the individual who purchases a variable annuity, he may obtain a significant profit when he converts his accumulated values into a retirement annuity *if* the guaranteed conversion is made on a basis more favorable than that obtainable in the market place. In other words, he can profit if the cost of annuities has increased because of mortality improvement.

B. *Issuing Company's Viewpoint*

1. *Mutual funds.*—Significant profit cannot normally be expected to be earned directly by the mutual fund which issues its shares. Neither can any substantial profit be obtained from the "sales and administrative" loadings charged to a client's contribution by most funds. The typical loading charged is usually needed to pay the sales commissions and other administrative expenses incidental to the actual mutual fund sale. In addition, the operating expenses charged against its assets by the mutual funds only cover normal record-keeping, legal, auditing, and so forth, expenses, without provision for profit. However, the *real profit* obtained by the issuing company is derived by the investment management fees charged by the mutual fund's management company. Investment management charges vary considerably among mutual funds, but, in general, the annual charges range between one-fourth of 1 per cent and one-half of 1 per cent of the market values of the funds. For extremely large funds with relatively high levels of current contributions, profits can be substantial, since the management charges are more than adequate to cover the direct charges for investment services (including research services), administration, and overhead. For new mutual funds, the market values of funds will probably be $30–50 million dollars, or higher, before any profit can emerge.

2. *Variable annuities.*—Most companies are making annual investment management charges equivalent to about one-third of 1 per cent of the market values of the underlying common stock portfolio. Assuming that the "loading" deducted from the variable annuity consideration is equiva-

lent to that of mutual funds and that "sales and administrative" expenses are also about the same, the profit margins on variable annuities should be similar to those of many mutual funds. The current level of charge probably reflects the insurance industry's expectation that many variable annuities will ultimately be issued for relatively low levels of contractholder contributions. Since the development of variable annuity products is truly in the embryonic stage, it is difficult to assess with any precision the long-range profit potential.

Since most variable annuity contracts make charges against the invested assets for guarantees of mortality and expense, these charges could ultimately be a source of profit to the extent that the combined expense and mortality risk charges prove more than adequate to cover the cost of mortality improvement and increasing expense levels.

III. MORTALITY AND EXPENSE RISKS

Under variable annuity contracts, charges for mortality and expense guarantees are made by deductions from the invested assets, and the charges often differ sharply between group contracts and individual policies to reflect substantial differences in the nature of the guarantees. For example, many group variable annuity contracts provide five-year guarantees, while individual policies will include lifetime guarantees. Mutual funds, however, have no built-in provision for mortality guarantees, and competition is the only "control" over the level of operating-expense charges. If mutual funds are employed for financing a retirement program, there usually are no guarantees of the rate at which funds can be converted into a retirement annuity. With these basic differences in mind, let us look at the risks of mortality and expense from the viewpoint of both the contractholder and the issuing company.

A. *Contractholder's Viewpoint*

The importance of guarantees against the risks of improving mortality and/or increasing expense levels depends entirely on the goals of the individuals who are investing their funds *and* on their judgment as to the appropriateness of the charges made for these risks.

On the one hand, if an individual is not investing for retirement purposes, he probably will not consider that a guarantee of mortality has much value. Then, again, the discerning investor might evaluate the actual operating charge of a mutual fund and decide that there would have to be dramatic increases in operating costs before an insurance company's guarantee of expenses would be worthwhile to him.

On the other hand, the individual who is investing for retirement pur-

poses could easily conclude that the guarantee of both expenses and mortality is well worth the price, because he knows that the average life expectancy of annuitants has been continuously improving and he expects a continuing inflationary movement in expense levels. Naturally, these guarantees—especially lifetime guarantees—are most important for the relatively small investor who does not usually have substantial financial resources.

B. *Issuing Company's Viewpoint*

1. *Mutual funds.*—Since mutual funds are primarily intended to provide an investment medium, a mutual fund may take the position that the best "insurance" against inflationary levels of expense is a successful investment program and might also point out that as little as one-fourth of 1 per cent additional average annual earnings often will compensate for a 100 per cent increase in the level of a mutual fund's operating expenses. In addition, mutual fund advocates might take the position that the flexibility in choice of investment programs available through mutual funds allows an individual to more precisely achieve his investment goals through a mutual fund rather than a variable annuity. Consequently, if the individual is concerned about inflationary trends in expenses, he can readily invest in a mutual fund with a capital growth objective.

2. *Variable annuities.*—The justification for an insurance company's offering variable annuities lies in its offering guarantees—of expense levels, of annuitant mortality, and, perhaps, of the return of invested contributions upon the death of the annuitant during the accumulation period. In general, the current annual charge for lifetime guarantees of expenses and mortality has been set at about 1 per cent of the invested assets. Also, this charge has been established on a combined basis, so that no distinct charge has been set for either the expense guarantee or the mortality guarantee. In view of the studies of the rate of mortality improvement, a charge of about one-half of 1 per cent of the invested assets per annum probably will be quite adequate to cover the mortality guarantee, leaving about one-half of 1 per cent per annum to cover the expense guarantee. Assuming that this entire one-half of 1 per cent annual charge is available to cover the expense guarantee, let us evaluate its adequacy. First of all, pension actuaries consider, as a rule of thumb, that an adjustment of one-fourth of 1 per cent in the interest rate is the equivalent of about 5 per cent of the level annual contribution to a pension plan. Likewise, a margin of one-half of 1 per cent in annual charge against invested assets can be considered roughly equivalent to a provision for a built-in, long-range margin of about 10 per cent of the level annual contribution. If current expense levels are expressed as a percentage of annuity considerations, this charge

for the expense guarantee appears to be entirely adequate and should cover a substantial increase in expense levels. Naturally, these risk charges can be the source of future profit to the extent that an insurance company is able to control its expense levels through computerization.

IV. LAW AND GOVERNMENT REGULATION

Law and government regulation of mutual funds is well established and quite clear—both at the federal and state levels. However, the same cannot be said at this time about variable annuities. Law and government regulation of variable annuities is truly in evolutionary form and, consequently, quite confused.

There is little question any more that variable annuities are subject to the provisions of the federal securities laws which are administered by the Securities and Exchange Commission (SEC). However, the SEC's jurisdiction applies to variable annuities because the courts have concluded that equity-based variable annuities are primarily "securities." Simultaneously, the state insurance departments have authority to regulate insurance companies and their activities, and, generally, state laws have granted the state insurance department jurisdiction over variable annuity contracts and have exempted them from the registration under the state securities laws. In a few words, the major difference between the law and government regulation of mutual funds and variable annuities result from a mutual fund's being regulated purely as an investment company (which it is) and the insurance company issuing variable annuities being regulated as an investment company with respect to its separate account and as an insurance company with respect to the guarantees that the contract underwrites.

At the federal level, then, both variable annuities and mutual funds are regulated under the Securities Act of 1933, the Securities Exchange Act of 1934, and the Investment Company Act of 1940. Although the SEC has granted exemptions to certain group variable annuity contracts that meet certain criteria, those exemptions essentially apply to pension or profit-sharing plans established by larger corporations (twenty-five or more lives) and union-negotiated pension plans which are qualified under Section 401 of the Internal Revenue Code. My comments in this discussion will pertain to either group or individual variable annuity contracts which involve the investing of an individual's own contributions.

A. *Contractholder's Viewpoint*

Since the SEC requires that a current prospectus be delivered to each prospective contractholder or mutual fund shareholder, each contractholder will obtain, presumably, an adequate description of the operation

of both types of investment funds, the charges made, and properly audited financial statements. However, because a variable annuity contract is designed for both the accumulation of funds *and* conversion to a retirement income, and because the variable annuity incorporates guarantees of mortality and expense, the variable annuity prospectus is extremely complex and difficult, if not impossible, for the client to understand. As a counterpoint to this difficulty is the fact that the variable annuity contract is an "insurance contract," and the client has the assurance of the continuity of investment management and the quality of such management because the variable annuity contract is regulated by both the SEC and the state insurance commissioner. Psychologically, the client's confidence in the well-recognized soundness of insurance company investment management provides the greatest assurance of long-term good performance.

In regard to the sales presentation of mutual funds and variable annuities, the client will recognize significant differences as a result of the mutual fund salesman's emphasis on past performance of his fund and its long-range investment objectives and the insurance company agent's efforts to demonstrate the ultimate growth potential obtainable through a variable annuity and the resulting prospective levels of retirement income possible. Also, the agent will point out how these objectives will be met if the investments yield 0, $3\frac{1}{2}$, or 7 per cent per annum. Since variable annuity funds are in their infancy (or just commencing), the agent will have little or no performance to which to refer. These differences in emphasis represent the differences in regulation which the SEC applies to each type of investment vehicle to reflect the different characteristics.

B. *Issuing Company's Viewpoint*

Since a mutual fund share is a certificate which evidences an ownership interest in an undivided investment fund (invested in securities), it is readily negotiable and no personal relationship exists between the holder and the company. A variable annuity contract represents, however, an obligation on the part of the insurance company to perform in a certain manner. For example, the insurance company literally owns all the variable annuity assets, and the contractholder has a right to demand performance just as long as he keeps his contract in force. This essential difference in concept creates the following major differences between mutual funds and variable annuities.

1. Securities of open-end investment companies must be redeemable within seven days after a shareholder requests redemption. Under a variable annuity contract this type of "redemption" after the annuity commences is impractical, because it would undermine the actuarial basis of

the annuity rate structure. To solve this problem, insurance companies must seek and obtain SEC exemption from this requirement.

2. A mutual fund must provide the same basis for sales and expense charges for everyone participating in the fund. In order for a group variable annuity contract to reflect savings because of size, mortality, and so forth, through the experience-rating provisions of the contract, the insurance company must obtain a special SEC exemption from this requirement.

3. Broker-dealer registration imposes on a mutual fund's sales organization administrative and policing requirements to ensure that its "associated persons" (those who sell mutual funds) act properly under the 1934 Securities Exchange Act. However, with variable annuities there is a question as to what organization should be licensed as a broker-dealer. Should it be the insurance company, a wholly owned subsidiary sales organization (in states where that is legal), or the company's general agents? An affirmative decision in either area creates its related problems.

For example, if the company itself registers as a broker-dealer, everyone in the executive and general management who has any influence over sales, variable annuity product development, administration, and so on, must meet special examination requirements of the SEC. This also opens the door to the potential SEC "invasion" of the company's general operation.

If the insurance company establishes a subsidiary sales organization, most of the above-mentioned problems are eliminated, but there remains the disadvantage that the new company must be licensed in the various states and the agents must be licensed with the new company.

The third approach (licensing general agents as broker-dealers) not only creates additional burdens for the general agent but could eventually have a traumatic effect on the general agent's performing adequately in his area of primary responsibility—developing new agents and ordinary insurance sales.

4. In most states mutual fund salesmen can qualify to sell mutual fund shares by passing the NASD examination. In the field of variable annuities the problems of the insurance company become complex when it attempts to get its sales staff authorized to sell variable annuities, for the following reasons:

a) State licensing requirements vary for many states. Only thirty states have adopted the joint SEC-NAIC examination, and most states have additional licensing requirements.

b) Many states limit the variable annuity products that may be sold:
   (i) Some states allow group contracts but not individual policies.

(ii) Some states require that the contract be issued in conjunction with a qualified pension or profit-sharing trust.
(iii) Some states do not allow variable payout.

c) Some states make mandatory the passing of their security examinations.

V. SUMMARY

In this discussion I have outlined the principal differences between mutual funds and variable annuities from the viewpoints of the client and the issuing company, and I believe that you will agree that the differences are substantial. Both of these funding mediums have the specific purpose of providing individuals with a measure of long-term financial security.

Despite the obvious legal problems faced by the variable annuity industry, there is no doubt in my mind that the problems will be satisfactorily resolved and that variable annuities—in many different forms—will one day be a cornerstone in the insurance industry's program of providing individuals with lifetime financial security.

2. What other equity-based products could life companies offer?

Philadelphia Regional Meeting

MR. ROBERT F. LINK: "Other equity-based products" must mean "other than variable annuities and mutual funds." I am going to construe "equity-based products" broadly. Much of what I will say is similar to material presented in a recent talk by Don Grubbs to the American Pension Conference; in *A Variable Annuity*, by Grubbs and George Johnson; and in *With an Eye to Tomorrow*, the report of the ILI Future Outlook Committee.

What Are the Functions of Equity Funding?

Equities have two quite distinct roles in connection with funding for future benefits. First, they are used in the expectation that superior investment results, relative to fixed-income investments, will emerge. Such superior results may be applied to reduce costs, or they may be applied to provide higher benefits for the same dollar input. Second, equity investments may provide an index to determine rather directly the amounts of benefits. The simple equity-indexed variable annuity is an example.

Equity funding has been linked with inflation, and the suggestion has been made that a scheme of equity-indexed benefits will correlate better with living costs—or with rising-dollar wage levels. We should be very careful not to exaggerate the correlation. A fixed-dollar program providing benefits that increase automatically by 2 or 3 per cent per year will probably provide much better correlation with needs than an equity-based variable program, if historical results are any guide. But such a fixed-dollar program would be very costly.

An equity-based and -indexed variable benefit program offers a hope of larger benefits. However, the benefits fluctuate. Thus such an equity-based program should not be encouraged primarily on a hope of correlation but on the basis of the hope of larger benefits. The prospect of inflation merely intensifies the need to make the dollars of input to deferred benefit programs go as far as possible.

How Well Do Existing Insurance Products Protect against Inflation?

Aside from variable annuities, separate accounts, and mutual funds, the equity-investment element is currently minimal. It probably cannot be significantly increased under present insurance concepts and regulation unless benefits are equity-indexed.

On the other hand, existing insurance products are not entirely without features that protect against rising living costs. The following are a few examples:

1. *Permanent life insurance of level face amount.*—For a given income level and standard of living expressed in dollars, future family needs tend to diminish with time, once the family is completed. Thus a level amount of insurance would on such fixed assumptions become progressively more adequate.

2. *Built-in increases.*—The dollar amount of coverage under participating level-amount insurance policies may be increased by the application of dividends to provide paid-up additions or by the use of the fifth-dividend option. The rate of annual increase, at least for my company, seems to be less than a reasonable average of annual increases in the B.L.S. index.

3. *Guaranteed insurability.*—Under an option to purchase additional insurance, the insured may increase his coverage from time to time. The resulting high annual premium costs should be offset, to some extent but probably not entirely, by rising disposable income.

4. *Cost-of-living insurance.*—At least one company has issued a policy that by its terms provides coverage that changes with changes in the cost of living as revealed by the B.L.S. index. A portion of the annual premium buys a conventional level-amount policy. The balance of the premium is accumulated in a side fund. A term premium is withdrawn from this side fund each year to provide the remainder of the required total death benefit.

5. *Group term insurance.*—The usual group life insurance, being geared to salary, adjusts automatically to the employee's standard of living. Where coverage limitations prevent the adjustment from going as far as it should, periodic liberalizations can help the situation. Other group term coverages have similar characteristics.

6. *Insurance of the cost of medical care.*—To the extent that medical coverages provide benefits either in services or in reimbursement, they tend to adjust automatically to increasing costs of medical care.

What Other Equity-based Products Could Life Companies Offer?

Here are a few unevaluated suggestions, none particularly surprising, of possible directions for exploration. In order to modify insurance products in accordance with this assignment, we need to find means of employing equity investments. We should also explore whether equity-indexed benefits are possible.

Substantial use of equities to reduce the cost of insurance was suggested long ago in Part 7 of the *Syllabus.* The suggested enlargement of the New York common stock limit would be a modest step in this direction. The Part 7 item argued that conventional insurance might well have a much larger equity base than has traditionally been used without fundamentally endangering the solvency of the issuing company. There are, of course,

obvious problems of determining solvency in the face of large fluctuations in market values; these may be temporary but are still quite real.

The ultimate modification of the conventional level-premium, level-face insurance policy is one in which the entire policy is expressed in terms of units of interest in a common stock fund and reserves are invested in the fund. This means that the face amount, the cash value, and the premiums would vary to reflect fund performance. Such a policy was suggested in 1939 by one Dwight C. Rose in a paper presented at the annual meeting of the American Life Convention. Mr. Rose noted the need for investment balance. He suggested the absence of loan values. He did not consider the problems involved in collecting equity-indexed premiums. Perhaps the insured could maintain a balance with the insurance company from which premiums could be withdrawn in appropriate amounts on premium due dates.

Insurance companies, in order to remain solvent, have a need to invest in assets that match the nature of the promised benefits. This principle is applied in the case of fixed benefits and in the case of equity-indexed benefits such as variable annuities. If there were an available supply of debt securities payable in amounts indexed to the cost of living, perhaps there could be insurance or annuity products with benefits similarly indexed. The approach of Dwight Rose could apply just as well here.

At a more attainable level, we could presumably modify the existing design of a conventional insurance policy along the following lines. First, a portion of each premium would be held out of the fixed-income cash value and would instead be credited, on an appropriate net basis, to an equity account. The total cash value of the contract would thus be reduced by the accumulation of this portion of net premiums at the reserve interest rate and would be increased by the accumulation in the equity account. Second, the face amount under the policy would be changed to exactly the same extent. The total effect would, in theory only, be like financing the periodic purchase of mutual fund shares by a policy loan.

This hypothetical insurance policy should include a basis for settlement in terms of a variable annuity, either dependent on survival of one or more beneficiaries or perhaps payable for a fixed period. It would presumably be unsatisfactory to settle it in a lump sum or to convert it instantaneously to fixed benefits at the insured's death.

With or without any structural or funding modifications in the basic insurance policy, it would be theoretically possible to provide settlement options in the form of variable periodic payments of some sort, with an equity base.

Probably the most desirable insurance contract would be one contain-

ing these features: (1) investment of a portion of the reserve in an equity account, with some options on the proportion; (2) some opportunity to vary premiums and face amount within appropriate limits; and (3) benefits payable in the form of a variable annuity indexed to the cost of living. The first and second features seem attainable; I have a little difficulty with the third. Perhaps one approach would be to have a simple fixed annuity with a built-in, guaranteed increase of, say, 2 per cent per year.

Turning aside from individual life insurance for a moment, if we accept the equity-indexed variable annuity as the insurance company product for variable benefits, this principle can be extended in various ways in the group and individual fields. In addition to settlement of individual policies there are widows' benefits. If a retirement plan provides age retirement benefits in the form of variable annuities, is it not even more desirable to use variable annuities for widows' benefits, where the period of exposure to rising living costs may be much greater?

How about individual and group long-term disability benefits? Does not the same need arise? Could we have disability annuities that are equity-based and equity-indexed? There is an additional problem with individual disability coverages in getting the initial income amount under the coverage to adjust from time to time without running into problems of insurability or overinsurance.

These suggestions probably have barely scratched the surface, and, as far as I know, have not added anything really new. The need for many changes in law and regulation is obvious. There are questions of agents' compensation. Also, the shift of another $50 billion or so into equity investments could have interesting effects on capital markets. One suspects that the next ten years will give many of us the sensation of rebuilding what has taken a hundred years or more to build the first time.

Los Angeles Regional Meeting

MR. WILLIAM D. SMITH: The question I am to address myself to is, "What other equity products could life insurance companies offer?" The committee could have added "within the limitations of the current regulatory problems," but it did not.

The most difficult legal and practical problems in marketing equity-type products are caused by the sometimes conflicting requirements of three regulatory bodies—the insurance department (or departments), the Internal Revenue Service, and the Securities and Exchange Commission. The constraints on our actions by these frustrating and illogical but nevertheless very real problems can easily obscure the underlying problem of determining the best product for the market. We may well end up with a

set of products designed primarily to avoid illogical regulations to the detriment of their intrinsic value as products.

I have chosen to enter what has been referred to as never-never land—going back to basics and discussing equity products based purely on the problems of fitting such products logically and efficiently to a market but ignoring the regulatory problems.

A life insurance company is a marketing concern which markets, broadly speaking, financial security. More narrowly, it markets financial security related to the assumption of life contingency risk. Most of us are probably in agreement that the industry has in the past defined its product a little too narrowly in avoiding the use of equity investments. That is the reason there are so many in this room today, I think. As a result we have lessened our effectiveness and lost part of the market. How well and rapidly we can repair the damage is an open question.

We, the life insurance industry, probably have an irreplaceable product in the assumption of life contingency risks, but the makers of kerosene lamps probably thought they had an irreplaceable product too, until Edison came along with a totally unexpected method of lighting and transporting the power for that lighting that must have been devastating to the kerosene-lamp people.

We face rather constantly the specter of government's assuming all life contingency risks. That should limit our feeling that our product is irreplaceable. There may be other, unexpected ways in which we could lose the irreplaceability of our product.

I have chosen to broaden my question slightly by considering all forms of products where protection of purchasing power is offered or implied in some form with or without the use of equity investments behind it. In this context, group life, accident and health, and pensions involve coverage where most of the risk can be passed off to the employer or others. The individual product is a more interesting one to consider. I have also chosen to ignore the mechanical system of providing purchasing-power protection. Whether it is done directly within the policy or by use of special dividend or coupon features is not important as long as it is done.

I would like to discuss four basic products and how the use of equity investments can fit in with those products. They are term life insurance, permanent life insurance, annuities, and accident and health benefits.

In term life very few assets are accumulated, so it would seem difficult to find ways in which equity investment could help. I could only think of four.

First, we could provide level premium term contracts with benefits increasing by some outside measure. Consumer price index is the measure

most often thought of, but almost any measure, logical or illogical, could be used. This is actually being done, of course. There is a company in southern California offering a ten-year term consumer price index rider. The companies that offer this type of product do so with premiums high enough to pay for the maximum increase, and usually there is some upper limitation placed on the total increase or the annual increase. A company with sufficient surplus could set aside a portion of that, invest it in equities, and expect the additional earnings to offset the increased claim costs. This would add a new risk, that of the investment risk, to a product which does not now include that risk.

Perhaps (and this would be very difficult to measure in advance) in the long run the additional risk would be low enough to allow a lower premium than the present one for this type of product. It would require a modification of the present philosophy that all assets belong to all policyholders. It would certainly be more practical in a stock company. Perhaps the regulatory problems would not be overwhelming.

Second, we could have a level premium term contract with surplus invested in equities, the results of that surplus investment providing for fluctuating amounts of insurance. It would not seem practical to move all the risk to the policyholder. A reduction from the initial face amount would probably result in mass cancellations. A modification providing that the amount would never decrease below the previous years or below the initial face amount might make it more practical.

Third, we could provide a product where the benefits increase according to some outside measure with a commensurate increase in premium. This could be done very easily under current regulations. Most of us would feel, rightly, that the assured would be inclined either to lapse or to retain the initial premium and amount of insurance except, of course, the uninsurables, and that gives us a different type of problem. It is very difficult to see how equities could help here.

A fourth approach would be to offer each insured the right to increase benefits by the payment of additional premiums. That is different only mechanically from the previous one, I believe.

I would conclude that the most likely trend in the area of term insurance is going to be the offering of face amounts which increase according to some outside index. Setting aside special surplus for this kind of product would seem to me to be an almost insurmountable philosophical problem.

In the area of permanent life products, assets are accumulated so that equity investments could be of help. We could provide a level premium product, with benefits which change by the consumer price index, placing all the risk on the company. It would require a great deal of surplus to

absorb fluctuations, but it should be very popular. It would, of course, require a lot of modification of our present loan and cash-value concepts and of our laws.

A modification could be for premiums varying by some outside measure, but that would further complicate the cash-value problem and would require further changes in concepts and laws. It would undoubtedly also involve a computer to keep track of individual equities, because I would assume that individual equities would vary at least by month of issue.

We could provide a level or increasing premium with the change or increase in amounts varying with the equity results of some investments within the company. This would be placing the risk on the policyholder, and, as in the term area, some limitation in decrease seems necessary. Again we would need modification of laws and cash-value concepts. There would be great reserve problems. It is an extremely complex path, and I could not begin to find any practical way to suggest a product that I think could actually be offered.

In the area of annuities, assuming that the life insurance company would offer guarantees of expense and mortality (which I think is fairly necessary if they are going to be called a life insurance product), we could offer a consumer price index product. Equities would help, but a great amount of surplus would be tied up to protect some fluctuations. It should be a popular product. The investment risk would all be on the company, of course.

If the payment is made to vary according to the actual investment results, we are talking about the variable annuity. This, of course, requires changes in existing laws, which we are currently trying to achieve. One question which arises is whether there might be too much risk on the person least able to afford that risk, the insured. There are infinite variations on this theme possible, with the company picking up almost any portion of the risk it wishes.

For accident and health products, in the hospital benefit area there is now a guaranteed renewable policy with the right of the company to increase premiums. It is difficult to see how equities could help or even that they are needed. That product seems to solve the problems fairly well. I think the problems there are not really related to purchasing power.

In the area of short-term disability benefits, any change in purchasing power during the disability payout period is probably not significant because of the short term, and during the premium-payment period the problems are very similar to life insurance coverage.

In the area of long-term disability there are some interesting thoughts. During the insurance period, the pay-in period, presumably it would be

helpful to have a product which protected the insured from increases in cost or protected his purchasing power; certainly during the payout period the problem is analogous to the life annuity. But this particular product—we might call it a long-term disability variable annuity—would seem to have all the problems of the variable annuity plus plenty of the problems of long-term disability. I do not expect to see any great rush toward this type of product.

Much of the life insurance industry's activity has been quite obviously centered on a much easier approach, perhaps better in some ways than those I have just discussed; that is, the sale of a pure investment product, largely equity, and some life risk contracts by the same sales force but with essentially different companies backing each of the products. This involves some difficult practical problems in terms of re-education or training, licensing, and change in philosophy, but it has one over-all advantage that is very significant. The products that are appropriate to this marriage are possible without any significant change in the present laws; since no major technical problems are involved, it could be, and, of course, is now being, done. Unfortunately, some of the major advantages of permanent life insurance are lost by the absolute separation of the investment and mortality risk.

MR. MYLES L. GROVER: Do you not think that the application of variable annuities to settlement options is the first step toward this never-never land?

MR. SMITH: Yes, but there might be a regulatory problem, since this would not be possible under most of the current laws.

MR. EUGENE H. NEUSCHWANDER: Perhaps this would require a different separate account for that purpose.

MR. SMITH: There would be no real reason to have a separate account just for settlement options.

MR. DANIEL F. McGINN: California presently has legislation pending to allow surrender values and maturity values to be applied under variable annuity options.

The equity-based variable annuity is only one solution to the problem. I think we are going to see a variety of cost-of-living indexes that will be available for annuity or settlement option payout purposes. My company, the Occidental Life Insurance Company of California, has been working on a single-premium, cost-of-living annuity as an adjunct to variable

annuity–type options. Some day we could very well be offering a choice from a whole series of consumer price indexes. The customer will pick and choose according to his choice and the liberality of the index. The consumer price index, however, does not solve all the problems, since a standard-of-living index can well be a more important factor. To me these ideas are intriguing, and I think we will see this kind of product within ten years.

CHAIRMAN ROBERT N. POWELL: The legislative facet of this problem has already been mentioned. There is also the problem that the consideration for the settlement option is applied at a point in time without the benefit of dollar-cost averaging during the pay-in period.

MR. GEORGE W. SHELLEY: Since many companies have a settlement option provision which provides for the purchase of income 103 per cent greater than that currently provided by single-premium annuities, we are almost automatically going to get into this business whether we want to or not.

MR. JOHN C. ANTLIFF: I think it would be essential to have one separate account for qualified variable annuities and a different one for nonqualified, because the investment policy should differ for the two accounts.

MR. McGINN: This is necessary also, because of the different tax implications. Under a qualified separate account, the capital gains are totally exempt under the Internal Revenue Code as long as they are used solely to adjust the values of the variable annuity. Capital gains arising out of nonqualified plans are taxable to the fund or to the insurance company that owns the fund.

MR. ANTLIFF: It would still be possible to use the same separate account for both qualified and nonqualified plans, because the different taxes could be allocated properly, if one is willing to work out the administrative and accounting complications. But the real reason for having different separate accounts is that the investment policies should be different.

MR. McGINN: I agree. The investment policies would be different between a qualified variable annuity fund and a nonqualified individual variable annuity fund.

MR. ANTLIFF: Mr. McGinn, when you talk about a cost-of-living– or CPI-adjusted annuity, I assume that you will have certain hedges that have the effect of not putting the insurance company on the investment risk.

MR. McGINN: There could well be restrictions on the amount of the increase in a given year and perhaps on a cumulative basis, but our approach would subject the insurance company to the entire investment risk.

MR. ANTLIFF: After considering the history of the CPI and common stock performance since 1900, I would be concerned about the rather prolonged periods of five to ten years when the performance of common stocks was very poor in relation to the CPI. It seems to me that it would be imprudent for an insurance company to take on the risks inherent in a CPI-adjusted annuity without any ceilings or hedges (on a cumulative basis).

MR. McGINN: Yes, I am a little concerned. While I should not speak for my company, I think it is willing to take the risk.

MR. HENRY B. RAMSEY: Are you concerned that the premium that you would have to charge for this will drive the prospect away?

MR. McGINN: Yes, this has been a minor concern.

MR. SMITH: When I was discussing this type of product, I indicated that a great amount of surplus would have to be set aside, and that is exactly what I meant.

Dan, is it necessary to have one separate account for individual nonqualified variable annuities and a different one for individual settlement options?

MR. McGINN: I think you can justify two separate accounts. Our thinking is still in the embryonic stage, but we plan to have only one separate account for all nonqualified plans.

MR. HILLARY J. FISHER: I wonder whether we could have a product combining a term contract and a deposit fund which would be invested in equities. This would permit flexible deposits, and the fund could be used to pay premiums in case the policyholder had to skip a premium sometime on the policy. At the same time, it would be possible to relate the amount of insurance to the cost-of-living index. The premium would increase with the amount of insurance, but the total deposit would not go up since part of the deposit in the fund would be diverted to pay premiums.

MR. SMITH: This sounds more like a whole life policy than a term policy in the sense that the whole life policy can be split into the mortality and investment components. We would be going one step further by putting

the investment component in equities rather than in the usual fixed securities. I agree that there are infinite variations on this theme, assuming that we have no regulatory problems.

MR. BERNARD RABINOWITZ: Mr. Smith mentioned the possibility of a permanent life insurance contract for an amount of insurance varying according to some outside index but with level, fixed-dollar premiums. Since inflation is expected to continue, it seems to me that we would end up trying to price-out premiums for increasing insurance. We would be trying to outguess the future of the outside index used and would undoubtedly run into a tremendous investment risk.

Would it not be better to regard the permanent insurance plan as a single-premium plan? In order to hedge against changes in the stock index on which the amount of insurance is based, the life insurance company would invest an amount equal to the single premium in exactly the same stocks which comprise the index. In addition to providing a hedge against a change in capital values, the company would be receiving dividend income. The element of insurance is introduced into the single-premium calculation by replacing the rate of interest with the dividend yield, that is, the ratio of last-declared dividends to market price. This would then put the company on risk for a mortality and dividend yield which is fairly stable for a given grade of common stock. Since single-premium insurance is unpopular, the first premium could be only 40 per cent of the single premium. The balance of the single premium would be financed by a loan repayable by the policyholder as an annuity or much the same thing, renewal premiums to return something like 6–8 per cent interest. In this way, if permitted by law, a company could run a life insurance business of this kind without needing large amounts of surplus to cover capital risks.

MR. DAVID A. WRIGHT: Do you think it is wise for the life insurance industry to contemplate underwriting risks which are not capable of objective statistical analysis? I submit that the life insurance industry traditionally has had considerable difficulties with its public image and its public relations; if it gets into this field, it is going to compound these problems. I can see that, as a consulting actuary, my role will be to endeavor to free excess reserves on behalf of the clients who are disturbed about the way their money is locked up. Do you think it wise for the insurance industry to embark upon this course?

MR. McGINN: We all have to live on faith, and we are not lacking in faith at my company. If a study is made of any period of time in which financial data have been accumulated, it will be found that there are very

definite peaks and valleys that last for some time but in the long run the success of a program investing in common stocks has been good enough to support the cost-of-living index or the standard-of-living index and to provide additional margins. We happen to have a brochure that illustrates the accumulation of funds during various periods of time. This shows that there would be strains on surplus, but in the long run the company will do all right. It is important to remember that the corporation will not suddenly have to cash out all its securities on a given day or even over a five-year period. This certainly would require the education of top management of a stock company to be cognizant always of the long range and to be unaffected by the peaks and valleys. We found, for example, that, if you look at our common general stock portfolio over a ten-year period, our over-all rate of return on a level annual equivalent basis has not been below 13 per cent. Some years it will look very bad, and at other times it will look magnificent. Fundamentally, if you believe in the long-range correlation between the movement of prices and the movement of the common stock market values of a managed fund, it is a risk well worth taking. I hope that Earl Clark, our president, will agree with me.

MR. THOMAS P. BLEAKNEY: Many municipal fire and policy pension plans throughout the country either now have or are aiming toward an escalator clause, which gears retired life pensions to changes in active life salaries or some other type of postretirement increase. I have appeared, as I am sure many of you have, before public bodies to indicate the enormous costs that such postretirement increases involve. I have stated that a far better way of doing the job actuarially is with the conventional variable annuity. However, I have made the same comparisons that you have, Dan, and I feel that over a period of time the variable annuity will cover and exceed the growth in the cost-of-living index or even in the wage index. It seems to me that it is up to the employer or the insurance company to "put up or shut up" on this very concept of variable annuities' meeting the cost of living. Although I think it is a substantial risk, it is one that they can be taking. From the viewpoint of an insurance company, we should not lose sight of the greater acceptability in the market of the index-type product in comparison with the unknown risk which the equity-based conventional variable annuity involves.

MR. McGINN: The equity-based variable annuity that we have today represents only the first step in the evolution of the entire complex of retirement benefits. After this first step has been taken, we can later make available a product, based on various cost-of-living-index options, which involves a shift of the risk from the consumer to the insurance company.

Once changes in benefits are related to the salary levels, this gives a limited cost-of-living–standard-of-living type of index. My impression is that the standard-of-living index on an annualized basis has shown an increase of about 5.5 per cent per annum, whereas the cost-of-living index has been increasing at about 3 per cent per annum. The combined index shows an increase on the order of 8–9 per cent.

MR. CHARLES F. PESTAL: The insurance industry probably has not been adequately using the products it now has as inflation hedges. One is the future purchase option, which gives the policyholder a chance to increase his protection using available fixed-dollar products. A second one is the dividend option to purchase paid-up additions, which allows for an increase in the protection from year to year. A third alternative is the use of settlement options, since as the policyholder grows older his wife is also growing older. Thus the increase in settlement option rates for the older ages again takes care of part of this need for extra income but not necessarily for more capital.

MR. PRESTON C. BASSETT: Dan McGinn, I certainly appreciated your comments. Since we in the consulting field do not have to take the risk, we can make all the suggestions. I think the insurance industry is going to fail miserably in providing financial security, unless life insurance, annuities, or other benefits are adjusted to meet changes in the cost of living or standard of living. Personally, I think the variable annuity step should be skipped, since it appears to provide a benefit that is not needed or desired by the public. The variable annuity does a fine job on the average, but individual people are not on the average. Pension benefits should vary with the cost or standard of living.

MR. McGINN: The variable annuity sales so far really have been to the tax-sheltered type of programs, such as tax-exempt organizations, public school employees, and the H.R. 10 group. These people are much more concerned with getting involved in an investment program with the glamor of common stock investments. Pres, I think you are right about the ultimate solution to the retirement problem—that is, that the variable annuity on the average solves the retirement problem but, for any particular individual, it may not work. Hopefully, by the time our present customers reach retirement age, we will have something better.

MR. HAROLD THOMPSON: It suddenly struck me that our discussion today is based on the assumption that the result of common stock investments in the future will be the same as it has been in the past. I feel a little nervous in not fully understanding the implications of this, because it is

primarily an investment rather than an actuarial problem. Perhaps a flood of life insurance investments in the stock market would affect the decision by corporations as to the means of raising additional financing. At any rate, I thought the basic assumption ought to be brought out into the open.

3. What combinations of life insurance and equity funds are being made for package sales?

Philadelphia Regional Meeting

MR. PETER R. WILDE: Let me say first that the word "package" means a lot of things to a lot of people. We might start by identifying the different possible combinations.

The first would be "one check." The client can select a blend of insurance and equity funds and write one check to cover both features.

Second, it could be an "all-or-nothing deal." You cannot have one without the other—you must buy both life insurance and equity products in a predetermined portion.

The third possibility might be the so-called "complementary plans." The classic example of this might be "buy term and invest the difference" —in other words, completion insurance offered on contractual plans.

A final possible combination might be "compatible product." You can have all of one and none of the other and all of the other and none of one or some combination thereof. An example of this might be a split-funded H.R. 10 plan.

With that as the backdrop, let us proceed with the analysis of the kind of combination we might employ. First I want to make a key point, which is that many people mistakenly conclude that a variable annuity is very much like a mutual fund. I think that Loren helped to explode that myth, but let me discuss the point further nevertheless.

In its broad sense during the accumulation period this may be partly true, but I would point out to you that the term "product" can properly apply to the variable annuity because it is a free-standing and basically single-theme solution: retirement. A mutual fund, however, is not really a product at all, any more than a life insurance company, a savings and loan association and/or a bank trust account is a product. I make the distinction because it is important, when one is looking at this question, to recognize that the mutual fund is a financial planning tool and can be used in a great many situations in which cash-value life insurance is currently employed. It cannot provide immediate death benefits, but it can provide for the accumulation of equity dollars to be used when, as, and if the client desires—for educational purposes, retirement, key-man deferred compensation, and so forth.

Perhaps the most obvious combination is the one that Bob Link referred to, namely, the use of a variable payout as another settlement option. If your company is like most companies, including Connecticut General, most of your death benefits are being distributed in lump-sum fashion

and it is rather frustrating to see that they often end up in equity investments through an insurance trust plan with a local bank.

The question is, "Why don't we have a variable payout, or, instead of holding the moneys at interest, why don't we put them into an equity investment where they could benefit not only from the fixed-dollar dividend income but also from the opportunity for capital gains?"

There are a couple of important considerations in examining this kind of question. First, a number of companies seem to feel that this does not represent a new sale and are puzzled by the comments about Section 22-D, which provides a form of retail-price-fixing in the mutual fund business. I think it is quite clear that, as of today, transfer of moneys from the life company fixed dollars into equity payouts would constitute a new sale and would require an additional sales charge. There is no real alternative at the present time, and it seems unlikely that we are going to be able to talk the SEC out of this right away.

The second thing that is troublesome is the fact that, if either alternative is selected by the policyholder or the beneficiary in advance and the benefits are going to be related to investment performance, at present that would be viewed as a security, and the entire product would have to be registered with the SEC under the 1933 and the 1940 acts. Won't it be exciting when the insurance policy with all its ramifications about sales load, guarantees, and administrative charges is exposed to the SEC?

The market areas that hold the greatest immediate potential are the qualified plan markets, generally sold by individual producers as opposed to the markets sold by mass merchandising. I am referring to the pension trust, profit-sharing, and H.R. 10 plan.

At a meeting in New York in January, sponsored by the AMA, there were about four hundred life insurance executives, which suggests that the topic is quite popular. A chap from Keystone indicated that in 1967 over 1,600 H.R. 10 plans were sold by Keystone, many in conjunction with some of our agents. I think that this is a very obvious and clear market for the life insurance industry; in the two months that we have been in this business it has become fairly clear that we are going to sell a good number of H.R. 10 plans.

We have a master trust, by the way, which allows a man to put all his money into mutual fund shares. We also have a prototype annuity plan, and we can blend and combine these in any combination that the individual desires. In addition, given individuals within a plan unit may pick and choose their plans, so that the doctor could take a 40-60 split, the hygienist 20-80, and the receptionist 0-100.

The profit-sharing area that I mentioned earlier has been barely

scratched so far by the insurance industry, and I am sure that one of the reasons for this is that we did not have the ability to get all the money. We got the insurance portion but not the equity portion, and with tens of thousands of profit-sharing plans out there, often administered by the individual as his personal trustee, this must become a better investment tool.

It goes without saying that the pension trust field is also an obvious and necessary field for the insurance offering mutual funds. Like the Connecticut General, most of the other large companies, I think, are finding a continuing drift toward split-funded pension trusts because most of those auxiliary accounts are held by the bank or at least outside the life industry. I think there is no question but that the insurance community wants to get started and can manage equity investments as well as the majority of the banks.

You might ask, "If this works well in qualified plans, then why not in the unqualified area?" My answer to that question, of course, is "Yes, why not?" In things like key-man deferred compensation, the combination of equity products and fixed dollars certainly makes a great deal of sense. It would seem to me that the insurance industry, with its knowledge of taxes, trust plans, and so on, can do a far better job than the typical fund salesman can do in combining insurance and mutual funds in an intelligent package. Classically, today the only way to do this is to sell the contractual plans with completion insurance as a sideline.

One thing that I should point out is that in many states we have to be careful about the so-called tie-in sale. A number of states are quite against the concept that there is one check for both products, fearing that to separate one from the other is thereby made impossible. If you can demonstrate that the man can continue the insurance without the equity, and vice versa, I believe that there probably will be no problem at present.

I do not want to talk at length on equity funding. This is a very violent subject with some violent advocates and violent critics. Reduced to essentials, as you may know, it involves the purchase of mutual fund shares and the pledging of those shares to the bank to finance the life insurance premiums.

It is a very wondrous concept, and I am sure many of you have seen some illustrations. There are really two main problems: (1) it is a great opportunity for the minimum-deposit boys to have another run at the game and (2) it is all too often sold, I fear, to people who do not really understand the complexities of the subject.

One other approach that I have heard of involves the sale of insurance with some pure endowments attached. Endowments mature annually and

then turn over immediately into the acquisition of mutual fund shares. The beauty of this approach is that this particular insurance company pays a somewhat higher commission on the dollars that ultimately flow to the mutual fund than if the dollars went directly.

Let me make one final comment. One thing that generates a great deal of controversy, as it does here today, is the debate over mutual funds versus variable annuities. I will not get into a lengthy argument with my friend Loren about the tax question, but I think that he has made certain assumptions that are perhaps a bit abstract and not too practical in making a tax comparison. Today we find more and more companies offering the policyholder the option of bringing money in from the auxiliary account under the annuity guarantees of the life policy. The variable annuity as a free-standing product also has mortality guarantees, and the policyholder is paying for those guarantees—somewhat handsomely in some company situations, as the 1.44 per cent charge cited earlier by Loren witnesses.

The question at the moment is really whether the policyholder is willing to pay that kind of guarantee charge or whether he prefers to wait until he is ready to retire and then switch the mutual fund moneys over from that vehicle into a then current, single-premium, immediate variable annuity.

I think it is quite possible that the SEC will look favorably on the idea that a variable annuity account is really a sister account to a mutual fund and will permit the transfer of moneys from one fund, if you will, to another without any additional sales charge. If this solution proves satisfactory, it should be fascinating to see whether mutual funds or variable annuities are the best solution to the qualified plan.

Los Angeles Regional Meeting

MR. RICHARD G. HORN: The marketing of life insurance and mutual funds in combination is not a new, or even a particularly recent, concept. These two products were actually sold in combination as early as the 1930's. Substantial interest in marketing life insurance and mutual funds in combination did not begin to develop, however, until some time in the late 1950's. The life insurance industry has generally viewed any activity related to mutual funds on the part of insurance companies or individual sales personnel as somewhat dishonorable until the past few years. The combination of mutual funds and life insurance now appears to have gained a considerable amount of respectability, and many of our most prominent companies are involved with mutual fund activity in one way or another.

The combination of life insurance and mutual funds can be made in several different ways. There are at least three types of combinations that are sufficiently distinct to warrant classification.

The first type of combination sale combines a decreasing term life insurance policy with a mutual fund certificate. In this first type of combination, the only purpose of life insurance in the combination is to provide a decreasing death benefit over the mutual fund investment period. The insurance is designed to "complete" the investment goal of the mutual fund investor in case of premature death.

The second type of combination sale combines an ordinary life insurance policy with a mutual fund certificate. In this combination, the life insurance product has three purposes. It provides a death benefit, of course, but, in addition, it develops cash values and it has guaranteed life income settlement option rates. Since this combination involves cash values, the salesman persuades the prospect to think in terms of balancing his investment program between fixed dollars and variable dollars. The fixed-dollar investment program is accomplished through the cash-value accumulation and the variable-dollar investment program is, of course, accomplished by the mutual fund investment program.

When an ordinary life policy is sold in combination with a mutual fund, it is quite common for the life policy to have an option in it which enables the insured to deposit additional money into a life insurance policy at some future date and thereby increase the amount of life income that he would otherwise be able to get under the life income settlement options. This option enables the salesman to offer the prospect a guaranteed retirement income rate at which a life income benefit could be purchased at some future time. The additional money needed to exercise this option would arise from the redemption of mutual fund shares at the date the insured wishes his income to commence.

The third type of combination sale combines a retirement income life insurance policy and mutual fund certificate. This combination is similar to the second type of combination. The main difference is that the life income available through the life insurance policy is fully funded by the life insurance cash values. The salesman will, thus, persuade the prospect to purchase a guaranteed floor of retirement income via the life insurance policy and to accumulate an additional savings via the mutual fund certificate in order to have additional financial resources that will reflect to some degree the changes in the purchasing power of the dollar.

From this brief outline of various life insurance and mutual fund combinations, it is obvious that the combination of these two products does do certain things, but it does not do everything. First of all, the combination does provide a vehicle for a variable-dollar build-up. Second, it does pro-

vide a fixed-dollar death benefit. Third, it can provide a vehicle for a fixed-dollar retirement income with the purchase rates guaranteed at the date of issue. It does not, however, provide for a variable-dollar death benefit. It also does not provide any method for a variable-dollar payout.

The combination of life insurance and mutual funds has some advantages but also some disadvantages from the standpoint of a life insurance company. The first advantage is simplicity. If a life insurance company is thinking of associating itself with equities in some way, I believe this is by far the simplest way to do it. The reason the combination sale is simple is that the investment activity, the administrative activity, and most of the distribution activity would be handled by the mutual fund management company and the life insurance company would not be particularly involved.

The second advantage is flexibility. The proportion of money from a combination sale that is directed into mutual funds and the proportion that is directed into a life insurance company can be varied by the salesman according to the particular needs and desires of the prospect. There is no necessity for balancing the mix in any particular manner.

The third advantage of combination sales is the minimizing of all regulatory problems. Since the two products are handled by separate corporations, many of the regulatory problems are avoided. The SEC is not concerned with the life insurance activity, and the insurance regulatory authorities are not particularly concerned with the mutual fund activities.

There is one more advantage of the combination approach from the standpoint of a life insurance company. The life insurance company is not, in any way, involved with the investment performance of the mutual fund. This can be debated, perhaps, but, judging by my experience, I believe that the insureds have a reasonably good ability to separate the two products in their minds. Some of the recent market declines that we have seen have not, to my knowledge, generated any significant amount of policyholder reaction against the life insurance company whose agent offered the combination of products. The policyholders seem to have understood what they purchased.

One of the distinct disadvantages of the combination, from a life insurance company's standpoint, is that a life insurance company does not realize any profit from the equity side unless it owns a mutual fund management company or a broker-dealer company. Without ownership of these corporations, there is no possibility of a profit element from the equity activity itself.

Another disadvantage of the combination approach is that there is a

possibility that dollars will be channeled into mutual funds that might otherwise have accrued to the life insurance industry.

There is another potential disadvantage to combination activity from a life insurance company's standpoint; this is the possibility that some loss of control over the sales force will develop. In order to sell mutual funds in combination with life insurance, the sales force has to be licensed to sell securities and it has to be contracted with a broker-dealer. The sales force would also probably be licensed with the National Association of Securities Dealers. As a result of these various licenses and contracts, certain members of the sales force might develop sales relationships with other mutual funds, and some gradual loss of control could develop thereby. The mutual fund product itself is apparently considerably easier to sell than the life insurance product, and this, again, can be some reason for apprehension on the part of a life insurance company that is thinking of introducing its sales force to mutual funds.

4. What developments have occurred in equity products offered by life companies in Canada and Europe?

Philadelphia Regional Meeting

MR. DONALD M. ELLIS: It has been interesting to note similarities and divergences between United States and Canadian developments. As most of you are fully aware, practices in the two countries on ordinary insurance are very similar and in some cases identical. On equity-linked contracts, however, there have been marked differences developing, probably as a result of the differences in legislation in the two countries.

I might mention mutual funds first, since the situation is very different in the two countries. In Canada the licensing of agents to sell life insurance is controlled by provincial legislation and, up to the present, the provinces have not permitted dual licensing for the sale of both insurance and mutual funds. There has been increasing pressure to change this restriction, but so far the Life Underwriters Association has stood firmly against dual licensing.

Furthermore, an insurance company under federal jurisdiction cannot engage in mutual fund business. Federal legislation prohibits an insurance company from owning more than 30 per cent of the common shares of any corporation with the exception of a few special situations; hence an insurance company cannot own the controlling interest in the shares of a mutual fund operation.

Moreover, an insurance company cannot issue a straight investment contract, so it could not have a mutual fund as part of its insurance operation. It is quite possible for an insurance company and a mutual fund to be controlled by the same financial interests, but currently there would be no mutual advantage because of the licensing restrictions. There are rumors that the legislation prohibiting the ownership of a mutual fund company may be liberalized in the not-too-distant future. If this happens, dual licensing would probably quickly follow, and the insurance companies would be back in the picture. In the meantime, they are giving little attention to the mutual fund field.

Nevertheless, mutual fund sales unrelated to insurance have grown rapidly in recent years. Possibly as a result of the investigations in the United States, the security commissioners here have become concerned with the charges levied against the purchasers of mutual funds. Last year, the federal government, with the co-operation of the provincial governments, set up what was called the "Canadian Committee on Mutual Funds and Investment Contracts."

The purpose of the committee was to conduct a study of mutual funds, including those administered by or sold through trust companies, banks, and other financial institutions, and a study of investment contracts and of variable annuity contracts sold by life insurance companies. It was stated that such a study would provide a basis upon which a decision might be made on whether additional legislation is required for the adequate protection of members of the public investing in these classes of security. The committee consisted mainly of representatives of the various provincial security commissions together with representatives from the federal government.

Up to this time, this committee has been concerned only with gathering information. It has asked various bodies for data in connection with the subject matter. The Canadian Life Insurance Association, among others, was asked to provide information with respect to variable annuity contracts and other long-term investment arrangements regarded as competitive with mutual funds and the adequacy of regulation thereof.

When this request came to the Canadian Life Insurance Association, a special committee was formed for the particular purpose of dealing with it. Soon, however, it was found that there would be other matters regarding variable annuities that would need consideration by the Association, and the duties of the special committee were enlarged. The special committee has supplied the information requested by the government, but, from what has developed to date, it appears that the government committee is not likely to be much concerned with the part that the insurance industry plays in the sale of this type of investment contract. One can never be sure, however. It could happen that we, too, will find ourselves involved in double supervision with respect to variable contracts.

There has been another development in recent months which bears on this whole subject. In April, 1967, the Alberta Insurance Act was amended to include the following subsection:

> Every insurer that issues or proposes to issue life insurance policies under which all or part of its liabilities thereunder, and the reserves therefor to be included in its annual statement pursuant to section 100, vary in amount depending upon the market value of a specified group of assets shall, at least 30 days before offering to undertake any insurance of that kind, file with the Superintendent the form of the policy, the form of the application for the policy, the form of all endorsements and riders to be used in connection with the policy, and all advertising material to be issued or used by the insurer in connection with the sale of that kind of policy.

Following the passage of this new legislation, the Superintendent of Insurance of Alberta sent a circular to all companies licensed in that prov-

ince suggesting steps that he felt the company should take to meet the new legislation. This matter was referred to the new special committee set up by the Canadian Life Insurance Association. The Association naturally felt that it would be most regrettable if the provinces were individually to establish regulations that might easily vary from province to province. A subcommittee was formed to co-operate with the provincial superintendents in establishing regulations that might be uniformly adopted throughout the country. In the meantime, the government of Alberta has agreed to apply its regulations only to companies incorporated in Alberta until such time as the superintendents have had an opportunity to settle on rules that could be generally applied.

The type of regulation that Alberta has contemplated calls for, among other things, a breakdown of the premium into its component parts, for example, mortality charges, expense charges, and so forth. Divisions of this type are reasonable enough for straight savings plans, but they would undoubtedly inhibit the development of endowment-type, equity-linked insurance plans such as are now popular in Great Britain. I will mention these plans again later.

One more factor peculiar to Canada that is of importance in this whole area is that of taxation. Most of you will be aware that there has been no corporation tax paid by life insurance companies except that on the earnings drawn out for the shareholders of the company. The interest accrued on single-premium deferred annuities has been taxed to the policyholder to some degree, but otherwise life insurance contracts have been free of income tax. In an effort to preserve this position, we have felt it undesirable to promote equity-linked savings plans in direct competition with plans of mutual funds, since mutual funds are subject to tax. However, in the qualified pension and other tax-sheltered areas, we have been on the same ground as mutual funds, so there has been no such problem.

This fairly well covers the background in which the insurance industry has been developing equity-linked contracts. The public interest in such contracts has been as great, I am sure, in Canada as it has been in the United States. If anything, inflationary pressures have been greater in Canada in the last few years, and there is a widespread lack of confidence in the future stability of the dollar. Many of you may not be aware that the new Canada Pension Plan, which was introduced in Canada on January 1, 1966, provides for the indexing of benefits. At the same time, legislation was passed to provide for indexing the universal old age security pension that had been in effect prior to the introduction of the Canada Pension Plan and has been continued along with the new plan.

Under both plans pensions were adjusted upward on January 1, 1968,

by the maximum of $2\frac{1}{2}$ per cent provided under the automatic formula related to the cost of living. At the same time, contributions to the Canada Pension Plan were levied on salaries up to $5,100, in place of the former $5,000 ceiling. Unfortunately, recognition of inflation in this way by the state probably tends to increase its severity. In any event, it is likely to lead many people to look for ways of offsetting its effect, such as may be found in equity-linked contracts.

Prior to 1961, any type of equity-linked contract would have been impractical in Canada due to investment restrictions. In that year, however, the insurance acts were amended to permit companies to establish segregated funds under which there would be no restrictions with regard to the maximum investment in equities, provided that the liabilities of the policies varied with the market value of the fund. Shortly after the passage of this legislation, many companies introduced group annuity plans involving such segregated funds.

In the years which followed, the growth in such funds was not particularly great, but there has been a gradual and continual enlargement of the types of such contracts offered. At the present time, most of the major Canadian companies offer something in the form of equity-linked group annuities. To meet the requirement of the Insurance Act, all such contracts contain an element of life contingency through the provision of at least an option of a guaranteed annuity at retirement. Some companies restrict the variable funds to contributions resulting from employer contributions. Other companies will permit both employer and employee contributions to go into the variable fund. Some companies require a guarantee of the employee's benefit at retirement, in which case the employer, of course, assumes the investment risk.

In other cases, the investment results affect the benefits paid at retirement or earlier. It appears that very few of the companies offer a variable payout, but some are undoubtedly considering such a step. Generally speaking, there has been quite extensive development of equity-linked contracts in the group annuity area.

Following the change in legislation in 1961, there was very little interest for a number of years in equity-linked life insurance plans. At the annual meeting of the Society in the fall of 1966, Mr. Graham Holland gave an excellent review of developments to that date in Canada and Great Britain with respect to equity-linked policies. It appears from his discussion that in 1966 his was the only company in Canada offering an equity-linked life insurance policy. He described their contract as one made up of two parts, the first part being a level-term insurance to age 65 and the second being a whole life insurance with the risk deferred to age

65. Sixty-five per cent of the first year's premium and 30 per cent of later premiums are devoted to the purchase of the term insurance and cover all commissions and administrative expenses as well. The balance of the premium is used to purchase units that accumulate to age 65, at which time they are used to purchase fixed-dollar, paid-up life insurance, the amount depending on the value of the units at that date.

At the present time, Mr. Holland confirms the view that he expressed in 1966. The plan has created a favorable reaction within his company's field force. It has probably aided in recruiting sales force and has been a worthwhile addition to their product line. The volume in force has been steadily increasing, but the sales have not been at all spectacular.

From that beginning in 1966, the interest in life insurance contracts of this type has accelerated rapidly in Canada. There are currently a variety of contracts being offered, although even yet, I believe, only one of the larger companies has such a plan involving life insurance. In plans of this kind, Great Britain has undoubtedly been far ahead of North America.

Several papers have been presented to the Institute outlining the developments in Great Britain, which have been quite extensive. Mr. Holland, in his discussion at the Society in 1966, also reviewed the British developments. He pointed out at that time that there were in operation something like forty plans providing an equity-linked endowment type of insurance, a great many of which were offered by small companies formed for the purpose of issuing insurance combined with the sale of unit trusts.

Most of you will know that in Great Britain an individual is allowed, within certain limits, to offset the life insurance premiums he pays against his earned income for income tax purposes. The combination of decreasing term and unit trust purchases set up by special insurance companies has qualified for this allowance. The entire payment, including the savings element and the term insurance, so qualified. This produced quite a deal, since in many cases the income tax savings was more than the cost of the insurance, so it could be shown that the insurance feature was in effect free.

The recent British budget has upset this to some extent. Hereafter, for a plan to qualify for tax relief, it has to include a guaranteed death benefit throughout of at least 75 per cent of the total of the premiums payable on the plan. To get around this obstacle, level-term insurance will now have to be combined with the savings plan instead of decreasing term. The result may be plans that are more comparable to those offered by ordinary insurance companies. Some ordinary companies have offered endowment plans that guaranteed the expenses, mortality, and interest involved in the policy but not the principal. Others have also given some guaranteed

minimum maturity value. This latter type is now being offered in Canada also by one of the leading Canadian companies.

One would think that the giving of a minimum guarantee would restrict the policy in some form or other. Presumably the company could put a proportion of the premium into fixed-dollar investment, so that, regardless of the level of the equity market, there would be sufficient on hand together with interest accumulations to meet the guarantee. If this approach were taken, the policyholder would, however, have a lesser degree of investment in the equity market. On the other hand, the company might plan to meet the cost of the guarantee, if it ever became necessary, out of its general funds. In that case, presumably the company would assess an annual charge against this type of policy to recompense its other policyholders for the risk of being called upon to meet the minimum guarantee of the equity-linked contract.

The current scene in Canada is one of experimentation, with many companies, perhaps most companies, interested in some degree in these developments. The wide variation in approaches being tried is illustrated by the following examples of individual plans now available in Canada:

1. An endowment policy with fixed premium but death benefit, maturity value, and cash-surrender values related to market value of equity units and with a minimum guarantee applicable to some of the benefits.
2. A combination of term insurance to age 65 and investment of a stipulated proportion of the annual premium in equity units. (See discussion by Mr. Graham Holland, *TSA*, XVIII, D678.)
3. A deferred annuity policy with net premiums invested in equity units until retirement age. The amount and date of payment of gross premium are optional, subject to a maximum and minimum within a calendar year. The proportion of gross premium deductible for expenses is subject to a stipulated maximum.
4. A provision under which dividends on a regular policy can be left on deposit with the company invested in equity units.
5. A contract under which a mutual fund provides a variable immediate annuity reinsuring the mortality risk with an insurance company.

In all probability this list is by no means exhaustive. As far as I know, however, no one in Canada has yet offered an insurance plan under which both the premiums and the benefits vary with unit values. Some of you will recall that, at the Annual Meeting of the Society in 1966, Mr. Adrian de Hullu described the plans being offered on this basis in Holland. Both premiums and benefits are expressed in "units" that will fluctuate in guilder value. This means, then, that the premiums payable by the policyholder, in guilders, will vary each year with the unit values. When the

benefits become payable, the amount payable, in guilders, will depend also on the value of the units at that time. The actual value of the units depends on a valuation from month to month of a fund of equity investments.

All types of insurance and annuity policies are issued on this basis. It will be noted that the policyholders receive all investment gains or suffer all investment losses. They never, however, share in profits or losses on mortality and expenses. There is no guaranteed minimum benefit in guilders.

Probably it is only a matter of time before this type of plan will be introduced by someone in Canada, too, unless we get bogged down by legislative barriers. For example, regulations such as those proposed in Alberta would in effect prohibit plans such as this, even though Alberta may not have intended any such result.

Nevertheless, I think we must be prepared for closer supervision of equity-linked contracts than we have ever had in our ordinary business. Probably as a result of the long postwar bull market, common stock investments have become so appealing to the man on the street that he could perhaps be unduly attracted by equity plans. Our legislators may well feel that it is their duty to protect the public from real or imaginary dangers in this business. Furthermore, there are still many thoughtful and influential insurance men who still feel that insurance is no longer insurance when it departs from guaranteeing a fixed number of dollars.

MR. PAUL A. CAMPBELL: I think we should be a little cautious about underestimating the significance of federal income tax, as it applies to the nonqualified variable annuity, in making comparisons between variable annuities and mutual fund products. I think it was Mr. Wilde who mentioned that in essence there is a double tax.

As I understand the situation, the distributions of investment income are taxed as income to the investor in the mutual fund, and, under a nonqualified variable annuity, distributions are taxed at the time of the maturity of the contract. In addition, the insurance company is taxed as it realizes capital gains, and it will pass these taxes on to the policyholder in the form of additional deductions against investment performance. So the deduction from the gross performance can be considered threefold: the investment-management fee, the guarantee charge, and the charge for federal income tax.

Some companies have gone so far as to guarantee this federal income tax, and they contractually deduct a further amount from the performance. For example, Valic and Palic charge an extra 36 points, I believe,

against the performance and guarantee no further effects of taxes; but, for those companies that are not guaranteeing it, it would be anticipated that there would be a certain amount of federal income tax coming out of investment performance every year.

If in this area "performance" is the name of the game, which I think it is, we can anticipate goals of 9 and 10 per cent of gross investment return and probably only 2–3 per cent of this will be dividend income; the remainder will be capital gains.

Hopefully, we would attempt to maximize the unrealized portion of capital gains and go for long-term performance, but, in any year in which the insurer had to surrender part of its portfolio, a substantial capital gain would be realized; the investor could therefore anticipate as much as 1½ or 2 per cent coming out of gross investment performance.

It boils down to the fact that with a nonqualified variable annuity you are comparing mutual fund growth performance to variable annuity net performance after taxes, and it does make a significant difference. A variable annuity really stands out in the payout period, where it does offer a guarantee, as well as in the tax-sheltered forms, where a good deal of tax savings can be realized.

One further point in connection with state regulation of variable annuities. There is an ALC-LIAA subcommittee working on a model bill and regulations for submission to the states with regard to variable annuities. Thus far, the work done on this bill has been very thoughtful.

MR. PETER R. WILDE: One of the questions we ask in any mutual fund sale is the source of the moneys, and, if it is our cash values, we are quite interested. We will also be interested if another company's cash values are involved. If this becomes a common procedure for some agents, I think we can be as tough as we have on the practice of twisting. That is an advantage we have with a controlled sales force. We speak firmly here to our sales outlets. This is a somewhat more difficult problem when you have the "big I" agent who tells you to go take a flying leap.

At least this approach can be more constructive than the fund organization that is not in the life business. This has been a problem in the past. The equity-funding business is a pretty tough game. They can make it pretty romantic with some of their illustrations.

MR. WALTER DUM. M. FACER: I do not know to whom this question should be addressed, but some figures were given projecting both variable annuities and mutual funds, and the assumption was made of 10 and 20 per cent rates of growth. But the interest rate was given as a

flat 3 per cent. I always understood that where there is long-term capital growth it is due to a steady increase in dividends. So, shouldn't that 3 per cent be escalated?

Second, as a matter of interest, one company at home (in South Africa) operates a type of policy where both the premium and the sum assured are expressed in units. We do find that we have to keep on our toes in the performance of our mutual fund, and the public, which used to judge us once a year when our annual report came out, now judges us daily from the mutual fund figures in the press.

MR. LOREN G. LOGAN: First of all, my figures assumed an annual capital appreciation of 5 per cent, not 10 or 20. The 10 or 20 per cent applies to the annual rate of turnover of the securities held by the two types of investments. It is true that the 3 per cent investment income is applied on a compound basis, so I do give credit for capital appreciation over the years assuming a larger investment return.

CHAIRMAN ROBERT M. DUNCAN: I might add that I think that the SEC and others are very conscious of projections of combined capital gain and dividend rates, and I think that the approach that many companies are going to follow is to assume a base rate of about 3 or 4 per cent, to produce a satisfactory level at the start of the pension; any amounts that are realized above that would, of course, go to increased unit values in the pensions. You do, however, have regulations looking at you on making long-term projections of rates.

MR. PETER F. CHAPMAN: A life product has been mentioned previously where both the premiums and the cash values would vary with equity values. Has research along this line gone far enough that it has investigated the compatibility of this product with the standard nonforfeiture and standard valuation laws as they are currently written? Has any thought been given to a revision of these statutes to make them applicable to this projected type of product?

MR. ROBERT F. LINK: I do not suffer from the disadvantage of knowing anything about variable life insurance. There has been some thought given to the implications of some of the standard provisions relative to variable annuities, because there is a study currently being given to a change in the New York law.

I do not think that in New York at least anybody has yet seriously contemplated, in an active way, the possibility of variable insurance, and I am not aware of any real study being given to this subject.

MR. ELLIS: Could I just add that in Canada, as most of you know, we have no minimum, so this kind of contract would be feasible under existing legislation.

MR. CHARLES L. TROWBRIDGE: Like other companies, we have been investigating variable annuities versus mutual funds from several different points of view.

Two points of view have been particularly stressed here. One is the tax difference. The second is the difference as far as the regulatory climate is concerned. I think these two points have been very well covered.

There is another difference of which I think we should all be aware. We have not, perhaps, talked about it so much at this meeting. I refer to differences with respect to simplicity of the concept.

I am personally very much troubled by variable annuities, simply because they are so hard to understand. I do not mean that I cannot understand them as an actuary but that it is going to be very difficult for the public to understand them. The variable annuity suffers a real disadvantage with respect to the relatively simpler mutual fund from this point of view.

The particular points of complexity are two. One of them is simply the life annuity principle itself. We, as actuaries, are accustomed to the annuity principle, and it has a straightforward meaning to us. We have to recognize that the public as a whole has really never bought the life annuity principle. We still hear the question, "Where does the money go if I die?" We have never really merchandised annuities successfully outside the tax-favored areas, despite the fact that we have been in the annuity business for years. The individual variable annuity suffers from the fact that it is an annuity, and it will always suffer from it.

The other point, one that is more technical and every bit as troublesome, is the misunderstanding with respect to when the variable annuity goes up and when it goes down. There is a natural feeling on the part of people who have heard a bit about variable annuities that the variable annuity ought to go up as the stock market goes up and ought to go down only if the stock market goes down. Technicians realize that it does not work that way at all. The variable annuity goes up or down depending upon whether the total investment performance of the fund is greater or less than an assumed investment return that actuaries establish ahead of time.

This puts a real burden on us. If we assume a low rate of investment return, chances are that the variable annuity will go up, as we would like to see it do. There will be a tendency, therefore, to keep the assumed

interest rate low. On the other hand, to the same person that we are trying to interest in a variable annuity, we may very well be offering an option to take a fixed-dollar. If we make the assumed interest rate low in the variable annuity, and higher in the fixed annuity, we may be simply prejudicing the case against the variable annuity. We may in effect be telling him, "If you buy at fixed dollars, you can have $100 a month; if you buy a variable for the same premium, we will start it out at only $80 a month but its chances of going up are good!" We get into an almost impossible competition between our variable annuity and our fixed-dollar annuity.

This setting of the assumed investment return is important, and its effect is very confusing. I do not see how anybody except the real technician is going to understand it. Whatever we do about this will have some real disadvantages, and it appears to me that these aspects of the variable annuity are going to make it very hard to live with.

CHAIRMAN DUNCAN: I can speak about that with feeling. We started out with the two units at about $10, and today the accumulation unit has risen into the neighborhood of $40 and the annuity unit is about $30. We are getting that question frequently. What we did was to put out a small brochure in layman's language to try to explain this, but the difficulty will be with us for some time.

We are going to continue the same approach, though. We think that this is the best way to provide the benefits, to set them out at retirement at as high a level as is possible consistent with the job we are trying to do.

MR. LINK: Part of the problem with variable annuities has to do with the fact that they are sold on the theory that variable annuities ought to go up, so you attempt to set the base rate low so as to make sure that they do go up.

There is another, possibly much simpler, way to look at variable annuities; that is to start out on the proposition that many people would like to have some of their resources in common stocks because they have the belief that common stocks will probably do better than fixed-income investments. So, if you take a fellow's annuity money and convert it into a variable annuity invested in common stocks on the same going-in terms that you would use for a fixed annuity, his annuity will be larger if common stocks do better and it will not be as large, obviously, if they do worse. It is a very simple proposition from that point of view.

MR. DONALD S. GRUBBS, JR.: Mr. Trowbridge has pointed out that if you use a lower interest rate on the variable annuity than on the

fixed annuity, thus getting a higher purchase rate, this might deter selection of the variable annuity under a profit-sharing plan.

It is good to look at the other side of the coin. One company specializing in variable annuities has used a 6 per cent interest rate, which gives them a much more attractive purchase rate and higher initial annuities. In a year in which the dividend yield is 3 per cent and the market value rises 2 per cent, they may have some difficulty, I suspect, explaining why the unit value went down.

One thing that has not been considered so far is the matter of brokerage commissions. If the insurance company or related company has its own broker dealer, it can receive all of the commissions upon purchase of common stocks, although it will probably direct part of these to other investment firms in return for investment information and services. If it does not have its own broker dealer, it can still receive a majority of these in the form of services provided through a broker dealer.

MR. WILDE: I cannot let that statement go by. We are a broker dealer. I think that the great hazard to avoid is antagonizing the brokerage community, many of whom provide some rather nice investment-research work. Obviously, there is a point beyond which you feel that you are not getting anything for your money; but that is a pretty delicate step to take, and I urge you before you "charge into the sunset" to think twice about reaping all those commissions and, in doing so, making all the securities and brokerage houses with which you work antagonistic.

MR. THOMAS P. BOWLES, JR.: We have made quite a few projections from the standpoint of the buyer to determine which of these products—the individual variable annuity or mutual funds—appears to be the more attractive product to him.

Recognizing the 1 per cent risk charge that is the common part of the variable annuity generally and assuming that if one buys a variable annuity he will have the same investment experience that he would have if he buys the mutual fund, and recognizing also the difference in timing and the incidence of federal income taxes, and then accumulating these funds and converting them at retirement into income to the individual, we have found that in almost every case it can be demonstrated that under the mutual fund the buyer is much better off. So, the problem that we see is that, if a company moves into the individual variable annuity marketing area, it is going to face some rather difficult and severe competition from those companies that have made the decision to use a mutual fund.

MR. WILDE: I will make one other comment. Connecticut General started looking at the equity-products question about 1965. You have seen from the comments made today one of our reasons for going into the mutual fund field.

I recall Jack Bragg's comment this morning about total marketing, customer orientation, and things to that effect. It seemed to us that, if we are concerned with the individual market, mutual funds, because of their flexibility, simply have a great deal more to offer than the variable annuity. The variable annuity has a definite place, obviously, the tax-sheltered field. In fact, the mutual fund cannot sell in the 403(b) market.

I think that, if you pursue the course of asking yourselves why you went into it and what you hope to accomplish, you come up against this very significant question: If you are going to provide an equity-product vehicle, why are you doing it? Are you trying to get more sales per call? Are you trying to recruit more salesmen, and so on? It seemed to us that it makes more sense (if you can eliminate the philosophic question) to add mutual funds for personal sales to individuals.

MR. LOGAN: I would like to make a couple of remarks about Tom's point. I have read with great interest the projections that Mr. Bowles and his associates have made comparing mutual funds and variable annuities. However, it was my feeling that the variable annuity was not given quite the favorable assumptions that it might have been given, and that is the main reason for my own illustration.

I believe that the figures Mr. Bowles speaks of assumed a 25 per cent personal tax bracket and also this troublesome 1 per cent charge for mortality guarantee. I feel that there may be insurers who will not put that in even in individual, nonqualified variable annuities.

MR. ALBERT PIKE, JR.: I would like to comment on the point that Tom Bowles just made. I have not seen his cost projections, but we in our association are very aware of the fact that there is a tax disadvantage to variable annuities in comparison with mutual funds.

They were mentioned just a short while ago. There is a double tax on the variable annuity. There is a tax at the time on the realized capital gains payable by the insurance company, and the insured has to pay a tax at income tax rates on the remaining part, after deducting those taxes on capital gains, in the payout period—averaged out, of course.

We have every expectation that we are going to get this tax inequity removed or at least alleviated. That is not to say that I am not personally impressed with the points that Mr. Trowbridge makes; even if taxes were

on an even basis, it seems to me that mutual funds come out a little better in competition, for other reasons.

MR. WILDE: One of the handicaps of that particular tax, of course, is that it tends to encourage the variable annuity portfolio to turn over more quickly because of the treatment of short-term gains as opposed to long-term gains. That does not seem to make any sense from where we sit, and yet, if there is no gain, you will encourage portfolio turnover in variable annuities—that is scarcely a long-term project.

MR. BOWLES: If the actuaries here would like to have some fun some time and would like to see cold perspiration break out on many brows, we suggest that you get one of the traditional mutual fund salesmen and have him come to your sales meetings to give you a dramatic representation of how you strip the cash value of your policies. We had this done at one of our conferences. Following that, we determined in our shop that we were going to get somebody in the shop to become licensed to sell mutual funds and life insurance just to go through this experience.

When I got the results, the broker dealer who sponsored us wrote me a cute little note. I think that what he said is pertinent and would be of interest to you. He said, "You actuaries can make an *A* but it takes a *C* guy to really sell this stuff."

SPEAKER FROM THE FLOOR: I did not see any of your projections of comparisons of mutual funds and variable annuities, but in tax pay-out did you take into consideration that, by the time the recipient of the variable annuity became an annuitant, he would be operating on reduced income and would undoubtedly have the double tax exemption that is associated with age 65?

MR. BOWLES: We did recognize this. As a matter of interest, if any of you would like to have copies of these projections, we would be happy to send them to you; they do show the relative economic benefits that accrue to the individual variable annuity purchaser and the mutual fund purchaser where both purchases are made to be held until retirement and converted into income. We made the projection on various assumptions to show the effect of the economic difference of changing assumptions.

MR. WALTER W. STEFFEN: Mr. Bowles just referred to comparisons between mutual funds and variable annuities and in the process made the assumption that the investment results would be equivalent.

I will ask Mr. Duncan a question. Isn't it true that last year, when you observed the results of many of the mutual fund investment programs, some of them had as much as 100 per cent capital appreciation and some of them had very small results?

CHAIRMAN DUNCAN: Yes.

MR. STEFFEN: One of the things that worries me about this activity is the fact that in the future investment results will play a very substantial role. It is my understanding that you are not allowed to use hypothetical comparisons and must use historical results of the fund that is being sold, although not everyone has acceded to the SEC regulations.

Our investment departments have generally been investing moneys under the philosophy that prevails in the investment programs of a life insurance company. I believe we have a different objective and philosophy prevailing for investing moneys in variable funds, and since you have experienced this situation I would be interested in your comments on it.

CHAIRMAN DUNCAN: It is true that the performance varies considerably. I can only report that our own approach has been that we were not trying to get the sort of performance that you see from some of these go-go funds.

We are structuring our investment base in terms of a retirement plan. We are taking a long-term approach. We are saying that we think that an additional equity base will give us for retirement plans a better performance than one based on debt obligations alone. We do not worry too much about short-term fluctuations.

I am not an investment man, but I know that our investment people are interested in the quality of management, the long-term prospects and that sort of thing, so that we are gearing our investment objective to the long pull. Historically, over the last fifteen years our average investment performance has been about 10 per cent per year.

MR. GEORGE RYRIE: It seems to me that we have gotten off the subject of variable insurance. But, even including annuities, I think that perhaps the public is somewhat more interested in increasing insurance and annuities than variables.

Our industry has spent quite a few dollars recently on a public survey trying to discover why people buy insurance. The whole emphasis seems to be on trying to ascertain what the customer really wants. We have been spending the last hour talking about variable annuities and mutual funds as if these are the only things they want.

I wonder if we should spend a little time on the Public Opinion Survey and on future studies planned to try to determine what the public really wants in the way of insurance benefits.

CHAIRMAN DUNCAN: I can report one thing that we did even though we are writing variables. We did get a demand for a regularly increasing benefit in connection with disability benefits, and we are now writing a group disability benefit that will increase 3 per cent a year regardless of the investment performance. It seems to be fairly well accepted.

MR. WILDE: George, I can only comment that in the group area there is a significant difference of opinion over whether the employee should bear the investment fluctuation or whether it should be the employer. There are some companies obviously writing or considering a cost-of-living type of variable annuity. They really should be careful in describing that term, because variable annuities should encompass a cost-of-living annuity as well. If you have a cost-of-living type of product, the employer antes up some more money, after retirement, instead of putting the burden on the employee.

Los Angeles Regional Meeting

MR. HAROLD THOMPSON: The federal insurance acts, in 1932, gave Canadian life insurance companies the right to issue "annuities of all kinds" and "insurance providing for the establishment, accumulation and payment of sinking, redemption, accumulation, renewal or endowment funds." The right to issue variable accumulation and annuity contracts was clarified by an amendment in 1961 enabling the companies to set up segregated funds where the company's liability under certain policies is dependent on the market value of the funds. The assets for these policies must be kept separate from the assets relating to the regular life insurance and annuity business of the company. All the tests for eligibility of investments relating to the regular life insurance and annuity business of the company apply to investments in the segregated funds. However, the percentage limits on common stock and real estate investments are removed. Thus the segregated fund may be 100 per cent in common stock, whereas a maximum of 15 per cent (amended to 25 per cent in 1965) of assets for the regular business could be in common stock.

This legislation, enacted after representations were made by the life insurance industry to the Canadian government, was aimed primarily at the group pension business in order to put the life companies in a comparable competitive position with other financial institutions, such as trust

companies. Trustees of pension funds were generally advocating that, in the long run, investment of a substantial portion of a pension fund in equities would result in a better return, was needed by the fund as a hedge against inflation, and would reduce employer pension costs or allow for provision of greater pension benefits.

By the end of 1966, of about one hundred companies active in Canada, three British and fifteen Canadian companies (including the ten largest) had established one or more segregated funds. During 1967, these segregated funds received $53 million in premiums, about 3 per cent of the total premiums paid by Canadians for life insurance and annuities. Of this total, less than $600,000 was for individual variable policies, the remainder being for group pension business. Just under 20 per cent of all premium payments for group pension business were made to segregated funds.

As of September, 1967, fifteen of these eighteen companies had one equity fund, two had two equity funds for different classes of policyholders and one had an equity fund for each of two classes of equity investments. In addition, five of the eighteen companies had a further equity fund for out-of-Canada policyholders. Seven of the eighteen companies had fixed-income funds in addition to their equity funds. Of these seven companies, three had two fixed-income funds—one in bonds and the other in mortgages; the remaining four had one fixed income fund—one invested solely in mortgages and the other three invested in bonds and mortgages combined. Most of these companies are prepared to establish a special separate fund for a large group pension policyholder. Fifteen such funds have been established by seven companies.

During the period of December, 1961—December, 1967, these funds have experienced an over-all return of $7\frac{7}{8}$ per cent per annum and have outperformed the Toronto Stock Exchange Industrial Index adjusted for reinvestment of dividends. It is significant to note that, at the end of 1967, equity funds represented 35 per cent and fixed-income funds 65 per cent of the total of all segregated funds.

A Canadian mutual fund, or for that matter any Canadian company, can own a life insurance company. However, Canadian life companies cannot own more than 30 per cent of the ownership shares of a mutual fund. This obviously will inhibit the development of mutual fund subsidiaries by life companies. It may put Canadian companies operating in the United States at an extreme disadvantage. This situation and the holding company concept are currently being discussed with the Canadian authorities.

One life company, 51 per cent of which is presently owned by a holding company, owns 26 per cent of a large mutual fund that, in turn, has a substantial interest in a large trust company. It would appear that an extremely large financial conglomerate is gradually being organized, and only time will tell what relationships will actually develop among these companies. At the present time the only business relationship which appears to exist between the life company and the mutual fund is that the life company underwrites the completion insurance which the mutual fund offers with its contractual plans and guaranteed certificates. Three relatively small life companies are members of groups of financial institutions which include investment companies or mutual funds, but each operates strictly as a life insurance company. One Canadian mutual fund has just formed a life insurance company as a wholly owned subsidiary.

In Canada, life insurance agents are not permitted to sell mutual funds, and mutual fund salesmen cannot obtain a life insurance license. The mutual funds have been arguing quite strongly against this for some years now, so far to no avail.

If the funds are successful in obtaining dual licensing, it seems likely that many will establish their own life companies and market insurance and annuity contracts linked to their own mutual funds. The Life Underwriters Association of Canada took a very strong stand against dual licensing in 1964. However, there seems to be evidence today that their attitude is softening slightly.

Contracts issued by life insurance companies are not subject to securities legislation, and the companies hope that their offering of variable contracts will not change this position. The provincial superintendents of insurance are currently considering legislation for the regulation of the sale of variable contracts. In addition, the federal-provincial Canadian Committe on Mutual Funds and Investment Contracts is studying the operation of mutual funds (similar to the SEC study in the United States) and is including variable insurance and annuity contracts in its study.

Canada does not have capital gains tax. Therefore, although dividends received from mutual fund investments are taxable, any capital appreciation is not. If any deferred annuity policy is surrendered for cash, the difference between the cash value and the premiums paid becomes taxable income. This is reasonable for fixed-dollar deferred annuities. For a variable accumulation deferred annuity, however, it means that any capital appreciation also becomes taxable income. On the contrary, no part of the cash or maturity value of an insurance policy is treated as taxable income. Under these circumstances it is likely that variable plans offered by insur-

ance companies will be designed to be classed as insurance rather than annuity policies, except for annuities qualifying as "tax sheltered" under Section 79B.

Individual variable insurance and annuity contracts are now being offered by nine companies in Canada. None of these nine rank in the first five, and only three rank in the first fifteen, by size of Canadian premium income. Three of these companies offer equity-linked deferred annuities which must be registered under Section 79B of the Income Tax Act qualifying the premium as a deduction from taxable income. A variable annuity payout is available in only one of these companies, and this company also offers a single-premium immediate variable annuity. In one of these companies the equity-linked deferred annuity is a side fund to a permanent plan "mother" life insurance policy. The "mother" policy need not be registered under 79B, but the equity side fund must. The other six companies offer policies in which the equity investment is integrated with regular life, endowment, or term insurance.

One company issues a participating whole life contract with the same death benefit, the same premium, and the same guaranteed cash values as its corresponding fixed-dollar plan. However, after the first policy year, half of the policy reserve is invested in its equity fund, and the difference between the performance of that fund and the interest earnings on the company's general fund is reflected in a yearly adjustment (positive or negative) to the regular fixed-dollar dividend.

One company offers variable endowment insurance policies of 15, 20, 25, and 30 years, or to age 65. They may only be sold on a monthly premium, preauthorized check basis. The minimum monthly premium is $25. The face amount of the policy is the monthly premium multiplied by 12 times the endowment period. Approximately 40 per cent of the first year's premiums and 85 per cent of renewal premiums are invested in a segregated equity fund. The death benefit, and the maturity value at the end of the endowment period, is the face amount of the policy or the then value of the equity investments, whichever is the greater. Thus, at maturity, the policyholder is guaranteed a minimum payment equal to the return of premiums. The policy contains guaranteed minimum cash values similar in amount to those guaranteed under regular fixed-dollar endowments. The actual cash value will be the guaranteed cash value plus a proportion of the excess, if any, of the then value of the equity investments over the guaranteed cash value. The proportion is the ratio of the number of monthly premiums actually paid to the number of months in the endowment period.

The other four companies offer endowment-type policies which are a combination of fixed-dollar, nonparticipating term insurance plus the value of investments made to a segregated equity fund.

In one company 35 per cent of the first year's premium and 70 per cent of renewal premiums are invested in a segregated equity fund. The plan provides level term insurance to age 65 plus the value of the accumulated equity investment. The amount of level term insurance ranges from two-thirds to five-sixths of the total prospective premiums, the higher portion applying when higher premiums are paid. At or before age 65, the value of the equity investments may be used to purchase paid-up whole life insurance at guaranteed rates and without evidence of insurability. The nonforfeiture benefit is reduced paid-up whole life. Every five years from age 19 to 49 the value of the equity investments may be used to purchase paid-up whole life at guaranteed rates without evidence of insurability and without terminating the policy. Disability benefits, double indemnity, guaranteed insurability, and decreasing and level term riders may also be added.

In one company 25 per cent of the first year's premium and 75 per cent of renewal premiums are invested in a segregated equity fund. The plan provides decreasing term insurance to age 65 equal to $1\frac{1}{4}$ times the remaining premiums to be paid plus the value of the accumulated equity investment. At ages 30, 35, 40, 45, and 50, part or all of the equity investment may be used to purchase paid-up whole life insurance at guaranteed rates and without evidence of insurability. The waiver of premium disability benefit may be added, and there is a special deferment option to age 70.

In one company no part of the first year's premium but $87\frac{1}{2}$ per cent minus $1.50 of renewal premiums are invested in a segregated equity fund. The plan provides decreasing term insurance to age 65 equal to twice the remaining premiums to be paid plus the value of the accumulated equity investment. At any time up to age 60 the equity investment may be used to purchase paid-up whole life insurance at guaranteed rates and without evidence of insurability. Both a fixed and variable annuity payout option is available. Decreasing term riders may be added.

One company offers two plans. Both plans are sold in numbers of units, each unit consisting of an equity premium of $30 in the first year and $60 in renewal years plus a term insurance premium. Each unit of one plan provides level premium, decreasing term insurance to age 65 equal to the value of a $5 family income rider plus the value of the accumulated equity investment. The second plan provides level term insurance to age 70 of

$1,000 per unit plus the value of the accumulated equity investment. Under this plan the term insurance portion of the premium increases every fifteen years.

Both plans provide for the conversion of the term insurance to any permanent plan prior to age 60 without evidence of insurability. Upon conversion the equity investment can no longer be continued. Under both plans the value of the equity investments at age 65 may be used to purchase paid-up whole life insurance at guaranteed rates without evidence of insurability. However, the amount of paid-up whole life may be increased, based on the then current rates of the company, if the policyholder provides evidence of insurability satisfactory to the company.

Both plans provide that the equity investment portion of the plan may be discontinued at any time, with the term insurance portion only being continued. Disability benefits, guaranteed insurability, and decreasing and level term riders may also be added to both plans.

Rather complete discussions of developments in the United Kingdom and in Holland appear in the *Transactions*.[1] In addition, a paper by W. G. Bailey, in *JIA*,[2] gives more exhaustive coverage of developments in the United Kingdom to 1962. No major changes have taken place in recent years, but the growth of this business has been quite substantial. By the end of 1966 there were thirty-seven equity-linked life insurance plans in operation in the United Kingdom, associated with ninety-one mutual funds. I do not propose to discuss developments in these countries but, instead, the developments in South Africa, where mutual funds are only three years old and equity-linked life insurance policies are even younger. For this, and the following information, I am indebted to the South African Mutual Life Assurance Society.

Assets of all mutual funds in South Africa were almost $60 million during 1967, and there has been a further growth of $60 million in the first two months of 1968.

In South Africa, life insurance companies are required to hold certain approved fixed-interest securities, amounting in value to at least 30 per cent of the value of liabilities in the case of individual policies and 40 per cent of the value of liabilities in the case of pension business. Liabilities are valued according to the Statutory Minimum Valuation Basis, with that portion of any liability which is related to the value of mutual fund units being taken at the greater of the book value or the market value of the units on the valuation date. This restriction on the freedom of investment of life companies has considerable bearing on the nature of the contracts they offer.

[1] *TSA*, XVIII, D654–90.

[2] Vol. LXXXVIII, Part 3.

Only a relatively small income tax rebate (8 per cent of premiums, with a fairly low over-all maximum) is allowed on ordinary life insurance policies. Approved individual retirement annuities are another matter. Full annual contributions up to a maximum of $1,333 (in Canadian dollars) are allowed as a deduction from taxable income. The pensions arising are fully taxable, but up to one-third of the pension at retirement may be commuted for cash. If this is done, $13,333 (Canadian) of the cash sum would be tax-free.

Life companies are taxed according to a formula broadly related to investment income but are not taxed in respect to retirement annuity business. As a result, virtually all development of equity-linked plans has taken place in the retirement annuity field, with particular emphasis being placed on the tax relief that is obtainable. The class of person to whom this relief is more valuable tends also to be the most sophisticated in his attitiude toward equity investment, and this probably accounts for the fact that there seems to be little, if any, demand from the man in the street for the equity-linking of ordinary insurance.

The South African Mutual offers a plan under which not less than 10 per cent and not more than 60 per cent of each premium may be linked to the value of units in a mutual fund which is owned by the life company. A level portion of the remaining premium may be used to purchase nonparticipating decreasing term insurance to the retirement age approximately equal to the remaining equity premiums to be paid. The remainder of the total premium is used to purchase a participating endowment policy at its normal rate of premium. Under this endowment policy, dividends are added by way of reversionary bonus additions to the sum insured. The policy reserves with respect to the decreasing term insurance and endowment insurance portions of the total contract are assumed to be matched by approved fixed-interest securities to the extent required. At the present time the reversionary bonus rate declared for this class of endowment is somewhat lower than that for endowment policies that are not linked to mutual funds. The reason for this is that the bonus can be based only on the results of the fixed-interest securities, whereas the bonus on regular unlinked endowments is based on the results of the general investment performance of the company, which would include a mixture of fixed-interest securities as well as equities.

With respect to the portion of the premium used to purchase mutual fund units, a small yearly collection charge is deducted as well as regular first-year expenses. As mutual fund units are bought in bulk, a small discount on the over-the-counter price is obtained from the mutual fund, and this discount is passed on to the policyholder.

The pension on retirement may be taken in the form of a regular fixed-

income annuity or a partially variable annuity. Under the variable annuity at least one-third of the amount applied toward the annuity must be applied toward a fixed-income annuity. This is required in order to tie in with the legislative restrictions regarding valuation and assets. The insurance company guarantees postretirement mortality and expenses under these variable annuities.

Retirement annuities may not be surrendered or assigned, so the question of a guaranteed minimum level of surrender value does not arise.

This company also allows some of its regular participating policies to cash the reversionary bonuses for the purpose of buying units in their own mutual fund.

The plan offered by the South Africa Mutual is also offered with slight variations by a number of other life insurance companies. One of the officers made an interesting comment: "Since the life office does not carry any investment risks under the linked portion, the scope for profits is not as great. . . . Consequently this plan is probably most suitable only where the life office has a share in the profits of the management company of the mutual fund."

Retirement annuities are a fairly recent innovation in South Africa and at present form a relatively small, but rapidly increasing, proportion of total business. Equity-linked retirement annuities are even more recent arrivals but show every promise of developing into a major sales line.

MR. BERNARD RABINOWITZ: Mr. Thompson mentioned that a company in Canada has a term to 65 policy with the balance of the premium going into an equity accumulation fund. If the policyholder wishes to liquidate the equity value, his accumulation is converted into a paid-up life insurance policy that is then immediately surrendered, with the result that the value released on surrender is not subject to tax. Is it not possible that the Canadian authorities will regard this as a device to avoid tax and, as a result, change the tax laws?

MR. THOMPSON: You are absolutely right that this possibility exists. In 1963 the government recognized a similar situation under which no tax was payable on the cash-surrender value on a fixed-dollar annuity if the cash value exceeded premiums paid. Because of abuse, the Income Tax Act was changed in 1963 to make this difference taxable similar to mutual funds. It is quite possible that they will see that the same situation exists now and make the appropriate changes in the tax laws. If they do change the tax laws, it would all depend on whether it is made retroactive. When they changed the law on fixed-dollar annuities, it was only applicable to policies purchased on or after a specific date.