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## FINANCIAL RESOURCE MANAGEMENT, STOCK COMPANIES

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1. Sources of funds (e.g., debt, capital, policyholders, coinsurance).
2. Priorities of fund utilization.
3. Enterprise risk exposure and management.
4. Policyholder vs. shareholder dividend philosophy.

MR. HERBERT L. DEPRENGER: The management of financial resources involves two completely different types of situations. An example of the first type is when an individual decides to buy a new car. Financial resource management is the process of deciding where to get the money to pay for the new car. Naturally, he would like to select the best of the alternatives, taking into consideration all of the factors that could have a bearing on his current or future status. He may have sufficient wealth so it could be merely a matter of liquidating an asset, such as selling some stock out of his investment portfolio. This, however, could have the disadvantage of triggering a capital gains tax, or stock market conditions could be unfavorable for selling purposes. He could borrow the money, but the repayment obligation might reduce his net cash flow available for living purposes to the point where he would have a reduction in his standard of living. The point is that in this situation funds are needed and each of the alternative sources has advantages and disadvantages. It is the type of situation typically encountered by young life insurance companies. It is almost a law that a young company must grow, and to finance growth alternative sources of funds must often be considered.

An example of the second type of situation is when an individual inherits a sum of money. In this case, funds are available and financial resource management is the process of deciding what to do with the funds. Naturally the individual would like to put the money to the best possible use taking into consideration not only all of the factors that might have a bearing on his own current and future status but also the status of others to whom he feels an obligation. This might be his church or his elderly parents. In other words, it may not be simply a matter of investing the money. On the other hand, he will probably choose to invest a portion of it, which leads to another decision making process. He could buy undeveloped real estate, but what happens if he dies two years later and his heirs are faced with inheritance taxes, a depressed real estate market and no cash? The point is that in this situation funds are available and their utilization requires a great deal of consideration. This is the type of situation typically faced by a mature life insurance company that is generating funds from its operations.

In a stock life insurance company there are policyholder funds and shareholder funds. Referring to the GAAP balance sheet, policyholder funds are represented by the benefit reserves and the participating policyholders' equity account. I think there is general agreement, particularly among actuaries, that policyholder funds represented by benefit reserves should be

invested in relatively low risk fixed interest securities with maturity dates that take into consideration the timing of policy benefit obligations.

The utilization of shareholders' funds is a different matter. Alternative uses of these funds should be considered and the first consideration should be the amount of cash dividends that will be paid to shareholders. What is retained in the shareholders' equity account can be used to finance almost anything so long as it is legal. Real estate ventures, acquisitions, diversification programs, coinsurance of real policies, coinsurance of fictitious policies ---- you name it ---- they've all been tried ---- not always successfully.

Policyholder funds represented in the GAAP balance sheet by the participating policyholders' equity account seem to be neither fish nor fowl. To put it another way, there is disagreement as to the proper utilization of these funds.

Certain states limit the portion of earnings from participating business that can be credited to the shareholders. New York, for example, limits this portion to 10%, so if 90% of the GAAP earnings from the participating business exceeds actual incurred dividends for the year, the excess is set up as a liability for future policyholder dividends: the "participating policyholders' equity account." It is similar to the surplus of a mutual company. Looking at it this way, if you take the position that these policyholder funds should be invested in the same way as policyholder funds represented by benefit reserves, then you are taking the position that mutual companies should not own casualty companies and should not enter into real estate ventures.

Before hearing from the panelists, I'll take a couple of minutes to describe our situation at Sammons Enterprises. It is a real life situation that points out the need for financial resource planning and management.

Sammons Enterprises, Inc. is a privately owned, diversified holding company with interests in hotels, wholesale travel, cable television, industrial supplies, real estate, printing and insurance. Reserve Life is our largest insurance company and is the direct or indirect parent of 6 other wholly owned life and/or health insurance companies. Sammons Enterprises came under new professional management 3 to 4 years ago. Until the last couple of years, there was little or no formal planning and very little coordination and control at the holding company level.

We file a consolidated tax return for the insurance companies and another consolidated return for the non-insurance companies. The non-insurance companies are in a tax paying position. The insurance companies have not paid taxes for a number of years due to losses and loss carryforwards. However, we expect to be in a Phase II tax paying situation by 1979 and two of our companies will have a Phase III tax this year, if nothing is done to increase their premiums.

Reserve Life has over \$50 million of capital and statutory surplus with \$150 million of liabilities. It would appear to have no financial problems but this isn't quite true due to "investments" in subsidiaries and affiliates. The Texas Insurance Department, in connection with a holding company act, limits such investments to the amount of capital and statutory surplus. Essentially all of these investments predate the act when Reserve Life funds were used to finance the Sammons' acquisition and diversification

programs. The investments have been reduced by \$20 million over the last 3 years but still exceed capital and surplus by \$14 million. Just last week we had an audience with the Commissioner and argued that the carrying value of the common stock of wholly owned insurance companies should be excluded before applying the rule of thumb. Our rationale is that these companies could be merged into Reserve Life. The result would be a reduction of \$20 million in investments in subsidiaries with no change in Reserve Life's financial position.

Our current situation suggests the following actions:

- (1) With respect to the 2 life companies that will shortly be in a Phase III position, we should transfer by coinsurance enough premiums from one of the other companies to prevent the payment of taxes. Alternatively, we could merge the companies into Reserve Life which has a Phase III margin. In either case there must be a business reason for the transaction besides that of tax deferral or avoidance.
- (2) We should maximize short term taxable earnings of the insurance companies to fully utilize tax loss carryforwards. A strategy of minimal growth would help in this regard.
- (3) We should channel as much income as possible from the non-insurance companies through the insurance companies to take advantage of a lower tax rate.
- (4) We should increase the upstream dividends from certain of the companies and use the funds to reduce Reserve Life's investments in affiliates. This would help satisfy the Texas department requirements and give Reserve Life more flexibility in investment policy.

Financial planning for the longer term calls for decisions as to the utilization of funds that are expected to be generated from operations. Specifically we should establish a growth objective and basic strategy for each industry group. We should also establish a dividend policy for each company (or industry group) and we should have an overall diversification policy.

MR. NORMAN E. HILL: As with most items regarding life insurance companies, discussion of financial resource management is probably more complicated than for the average industry. Among other reasons, this is due to the three distinct ways of accounting for life companies: GAAP, statutory, and Federal income tax.

#### Sources of Funds

The Statement of Changes in Financial Position or Statement of Source and Application of Funds has so far received scant attention among life insurance companies. It has increased in popularity among corporate executives and stock analysts, and may become more widely studied in our industry. I believe the main reason for its relative importance today versus net income statements is summarized by saying "Cash pays debts."

While a different emphasis than debt may be called for with life companies, it is interesting to analyze briefly a typical fund statement.

## STATEMENT OF CHANGES IN FINANCIAL POSITION - GAAP

	Year Ended December 31, 1975	Year Ended December 31, 1974
<b>SOURCES OF FUNDS:</b>		
Net Income . . . . .	\$ 998,479	\$ 822,200
Other increases (decreases) from operations:		
Depreciation . . . . .	69,936	67,761
Amortization of Deferred Acquisition Costs . . . . .	1,560,000	1,459,000
Deferred income taxes . . . . .	498,000	552,000
Increase in future policy benefits and policy claims . . . . .	3,321,289	3,741,928
Unearned investment income . . . . .	(276)	(291)
Investment income due and accrued . . . . .	(129,856)	(114,985)
Accrual of discount less amortization of premiums . . . . .	(155,186)	(188,405)
Net realized capital losses (gains) . . . . .	377,012	487,874
Net funds generated from operations	<u>6,539,398</u>	<u>6,827,082</u>
Sale of bonds . . . . .	14,797,044	3,706,630
Sale of stocks . . . . .	3,259,652	380,784
Mortgage loan repayments . . . . .	148,246	91,151
Sale of short term investments . . . . .	717,283	-0-
Change in other assets and liabilities . . . . .	279,411	209,917
Total	<u>25,741,034</u>	<u>11,215,564</u>
<b>APPLICATION OF FUNDS:</b>		
Purchase of bonds . . . . .	16,799,519	6,243,454
Purchase of stocks . . . . .	5,675,915	249,307
Purchase of mortgage loans . . . . .	-0-	-0-
Purchase of short term investments . . . . .	6,254	717,283
Net increase in policy loans . . . . .	133,374	1,693,433
Deferred acquisition costs . . . . .	2,786,000	2,432,000
Total	<u>25,401,062</u>	<u>11,335,477</u>
Increase (decrease) in cash balance . . . . .	339,972	(119,913)
Cash balance beginning of year . . . . .	479,177	599,090
Cash balance end of year . . . . .	<u>\$ 819,149</u>	<u>\$ 479,177</u>

## STATEMENT OF RETAINED EARNINGS - GAAP

	1975	1974
Balance at beginning of year . . . . .	\$ 2,194,219	\$ 1,372,019
Net income . . . . .	998,479	822,200
Balance at end of year . . . . .	<u>\$ 3,192,698</u>	<u>\$ 2,194,219</u>

The statement's objective is to show all sources of increases and decreases in cash balances for the year. Although normal procedure is to start with net income, numerous, significant adjustments to it are necessary. Non-cash items familiar to actuaries such as reserve increases and acquisition cost amortization are added back. Changes in invested assets, from purchases and maturities also affect cash balances, although not net income.

1. Debt - Life insurance companies have made little direct use of debt as a source of funds. However, indirect debt has been used to some extent. For example, holding companies have resorted to bank loans to provide funds to their life subsidiary or affiliates. Similarly, companies with surplus problems on a statutory basis have sometimes resorted to "surplus notes." These are usually unsecured loans, which on a statutory basis are shown as part of surplus. These should normally be shown as regular debt on a GAAP basis. As in all forms of debt, there are future interest costs which will be charged against earnings. The size of the charge should be measured against the rate of return from applying the funds.
2. Capital - Capital in this sense includes not only the par value of common stock, but also capital based on premiums from stock sales and additional contributed capital. This has been a traditional way of raising money for life insurance companies. Both initial offerings from new companies and subsequent stock offerings may be employed. In recent years there have been few stock offerings of life insurance companies. One reason has been a relatively slow moving market for many life insurance company stocks. SEC requirements for registrations, which now affect most stock life companies, may involve heavy legal and audit fees. As a result, raising capital through stock offerings is an expensive way of raising funds.
3. Policyholders may also be a source of funds through continuing premium payments. Especially after the first year, premiums provide a positive cash flow to the company until very high durations. Even policyholder dividends and benefit payments, if left with the company to accumulate interest, may represent an indirect source of funds. This depends on a comparison of rates earned by the company versus rates which the company must pay on these funds.
4. Coinsurance (including modified coinsurance), either ceded or assumed, may sometimes be considered a source of funds. This would probably not extend to situations where no funds ever change hands, and where only book entries for receivables or payables are made. However, in other cases, invested assets and funds from insurance transactions are transferred. Acquisition and maintenance expense allowances are paid by the assuming company to the ceding company, and eventually, profits (involving funds to a significant extent) are transferred in the opposite direction. Companies entering into fund-transferring coinsurance agreements have various objectives:
  - a. Surplus relief, either to satisfy statutory surplus requirements, or provide front-ended funds for other company objectives (by satisfying required statutory surplus levels, the company may allow itself to sell additional new business, and derive the benefits from its own funds)--this would call for ceded coinsurance;

- b. Tax considerations, which may involve Phase III questions, utilization of tax-loss carryforwards, or qualification as a life insurance company--coinsurance assumed or ceded may be appropriate in these cases, depending on the situation. It can be argued that vehicles serving to reduce tax payout, or at least defer it for a significant period, provide sources of funds.

#### Priorities of Fund Utilization

Basically, priorities depend upon potential profits to be made offset by the risk involved. There is a great need for life insurance management to have exact measurements of estimated profit potential from various utilizations. Different types of fund utilization include:

1. Investment in income-bearing or potentially appreciating vehicles.
2. Investment in generating new business.
  - a. Surplus drain in the first year, due to expenses allocable to that line; or
  - b. Research and development expenses which may not be allocable to that line but which are still connected with generating new business.
3. Acquiring or merging with new companies, either insurance or non-insurance entities. Today, costs of generating new life business and financing and training agents have all skyrocketed out of sight. Some companies emphasize an objective of growth through acquiring new companies. Renewal business generated by newly acquired companies serves as additional revenue.
4. Some companies make investments of their funds to conserve existing business. Normally, this would involve investments in specialized personnel. On long term insurance lines, profit margins can be determined by comparing net to gross premiums. If GAAP net premiums include all allocable expenses, this can provide a reasonable measure of potential profit margins. In looking at new business, the statutory surplus drain should also be projected. Analyzing returns on funds invested in an acquired life company depends on:
  - a. Whether profits now being analyzed are the same as those entered into projections and preacquisition negotiations; for example, with an official "purchase" (in an accounting sense) it may be difficult to project streams of profits corresponding to reserve changes and amortization appropriate for this type of accounting;
  - b. Whether any goodwill results from the purchase; or whether any item labeled "Present value of profits" has specifically been booked (to be written off as profits themselves emerge).

Analyzing potential returns from investments such as stocks and real estate is more difficult. Sometimes, they may require techniques that are outside

today's normal actuarial processes. However, once expected rates of return are measured, they should be clearly communicated so that actuaries and other executives can measure these against other alternatives.

#### Policyholder Versus Shareholder Dividend Policy

This is another area for measuring potential rewards (increasing funds) against temporary reductions in funds (cash dividend payments). Policyholder dividends will serve the following:

1. Potentially improve persistency or at least prevent deterioration. This increases future premiums which in turn provide future funds.
2. Potential income tax deductions.

Shareholder dividends may serve the following:

1. Enhance the market value of the company stock.
2. Keep current shareholders happy.

Statutory surplus drain from new business and its possible limitations on stockholder dividends should always be kept in mind.

#### Enterprise Risk Exposure and Management

In terms of risk exposure, the adage "Don't put all your eggs in one basket" is very applicable. Actuaries often see situations where company funds are overly committed to unprofitable or volatile lines of business. Similar situations occur with invested funds, where some state insurance laws have permitted undue concentration in a few large real estate ventures.

Today, the insurance industry faces a greater need than ever before for sound risk exposure and management. This means companies must be able to plan properly, to project their income and sources of that income, and then to analyze results with hindsight--to compare actual to expected results, and sources of variance and also reasons for it. Similarly, they must be able to project separately consequences of alternative courses of action in all three financial areas (statutory, GAAP, and tax) as well as related areas. Reasons requiring this type of management include:

1. Generally smaller profit margins today than in previous years, due to competitive pressures.
2. Greater emphasis on term insurance, which provides smaller profits per thousand of insurance.
3. Greater sales in the area of annuities and group insurance, with relatively low profit margins, as well as need for very favorable rates of investment return.

The life insurance industry needs to do more in making the complete projections described above an integral part of the planning process. More attention should be given to projecting earnings, and still more is needed to project sources and applications of funds in a scientific manner.

Companies that do not have an officer charged solely with planning should assign such responsibility to someone (or a team). The functions of this unit should specifically include emphasis on funds as well as on earnings.

MR. ROBERT S. YODER: I will be speaking from the point of view of a mature stock life insurance company issuing only non-participating life insurance. Capital Holding Corporation is a holding company with near 100% ownership of seven life insurance companies.

As Herb mentioned, I am going to point out that in the management of the financial resources of a life insurance company, it should not be forgotten that 90% of the liabilities consist of reserves which were based on long-term assumptions as to mortality and asset performance. Conservative management of such a company issuing only non-participating insurance will require, in addition to these reserves, a cushion of extra surplus. The Federal tax laws, in effect, recognize this philosophy with the definition of policyholder surplus and shareholder surplus funds.

In contrast to the non-participating contract, the participating contract provides some cushion in the premium structure. The long range dividend policy may be altered as experience changes, thus requiring less surplus.

Hence, the management of a stock life insurance company writing principally non-participating business must keep the extra cushion required in mind, and must concern itself with the proper utilization of surplus funds. One important function of management in financial resource management is to convince the stockholders and the financial community of this relationship.

The enlightened owner of the common stock of a life company who understands the need for some surplus accumulation is still principally concerned with return on equity. If the return on equity is not what the investor thinks it ought to be, he could, of course, sell his shares. However, the option to sell his shares may be more theoretical than real even for a New York Stock Exchange listed company. The institutional holder of a large block of shares does not always have this flexibility to cash out without incurring some penalty. The owner of the shares might also advocate to management that the company pay out more dividends to bring the return on equity more in line. The investor might contend that he could put the money to better use. In other words, he could earn a greater rate of return on those funds than the company can in its own business.

In 1976 Capital Holding Corporation's return on surplus funds (ratio of investment income earned on surplus funds after taxes to surplus) was less than 5%. This simply reflects the higher Phase I tax effect on the total portfolio yield. Looked at from this point of view, there is a severe shareholder penalty in retaining unneeded surplus funds because any risk investor will feel that he can do better than 5%.

Looked at from the point of view of return on equity (ratio of net profits after taxes to equity) the situation is more indicative of the potential of investing in the life insurance business. For Capital Holding Corporation this return for 1976 was 12% for GAAP earnings and 17% for statutory earnings. For individual companies it varied from 8% to 25%. Here again, the investor is interested in the trend of this rate of return and a rising trend is indicative of a favorable growth pattern.



Capital Holding's objective in financial resource management is to make an even greater investment in its own business (i.e., accelerate the growth of life insurance). By investing in its own business, management is utilizing surplus funds which earn less than 5% after taxes to invest in its own business with the opportunity to earn up to 20% after taxes. No investor ought to fault such a decision made with the prospect of such return. Management might also look at the feasibility of acquiring life insurance companies or blocks of life insurance business; preferably for cash.

Other methods of improving the return on equity are to:

1. Raise dividend payout. As mentioned, this will reduce shareholder equity and hence increase return on equity.
2. Acquire company's own stock. This would also reduce surplus and increase return on equity, but would not necessarily do anything for the shareholder even though theoretically it should make the remaining shares more dear. Acquiring one's own stock might project the image that the company cannot grow; otherwise it would invest in its own business.
3. Reserve strengthening and/or pay off past service liability on company pension. This reduces surplus and increases after tax profits, and hence increases return on equity.
4. Tax management. Planning to reduce taxes now or in the future by directing the company into a more favorable tax situation thereby improves return on equity.

MR. GARY B. CORBETT: I am going to discuss fund utilization from the viewpoints of both the utilizer and the utilizee (if there is such a word). As the chief financial and actuarial officer of our life company I have been in the position of asking our corporate parent for funding for our company's activities and have also been in the position of being asked for funds by the various product-line executives within the life company.

First, what about competing for the corporation's funds? I should explain at the outset that SAFECO Life is well capitalized for its size and thus we have really had no occasion to go to the corporation for additional funds to finance our normal operations. However, we have gone on a number of occasions to seek support for an acquisition of another life insurance company. These proposed acquisitions have generally been of a size that the life company could not have financed itself.

What does the Corporation look at in deciding whether to spend "x" millions on another life company? Source of the funds (Topic 1) is obviously one problem. Usually an exchange of stock is ruled out because of the reluctance to have a large block of stock controlled by one person. We have considered tax-free exchanges when this is an absolute condition of sale and when no large concentration of our stock in the hands of a single person would result. However, usually cash is the proposed basis of acquisition. There are three sources of cash available to the corporation. First is normal cash flow possibly combined with some accumulation of funds in short term investments. This source is practical only when the acquisition is relatively small. A second source is the selling of long term investments and a third, borrowing. Whether you sell investments or borrow will depend on such factors as the

current market for your investments, the interest rate at which you can borrow, and the amount of debt you already have outstanding. Needless to say, with interest rates being where they are today, debt is a relatively more attractive way of financing an acquisition than it was a few years ago.

Enough on sources of funds. Back to determining priorities for the utilization of funds. Even though we in the life company have analyzed a prospective acquisition and believe it to be a good buy at "x" dollars, the corporation must consider other factors in determining the priority to give to our request for funds. The first factor is basic: should capital be made available to anybody? If you remember the dark days of 1974 and 1975 for the P&C insurance industry, with the combination of severe underwriting losses and depressed stock prices, you will readily understand that capital was probably not available to the life company regardless of the attractiveness of a prospective acquisition. First priority had to be given to reducing the premium to surplus ratio of the P&C companies.

But, let us assume that capital is available. Should it be made available to us? Obviously, the answer depends on the alternate uses of the capital. We have never been in the position of directly competing for funds with another prospective new user. Thus the alternative use of capital is generally the yield on current investments or the cost of borrowing. We generally can show that the ultimate after-tax return on the proposed purchase price is greater than the after-tax return on current investments or than the cost of borrowing. However, that display is not sufficient. The corporation must concern itself with the effect on corporate earnings in the short as well as long run. And here we are talking about GAAP earnings.

Now, a slight digression. The accounting for the purchase of a life insurance company is still not entirely clear. Although there have been a few papers written on the subject and the Academy Committee on Financial Reporting Principles has drafted a Recommendation, it is still a theoretically contentious and practically difficult area. But let us assume you have somehow projected the GAAP earnings. Further assume that as part of the acquisition you will purchase a block of in-force business at a price that yields a 10% return on your investment. You will inevitably find that the resulting GAAP earnings will start well under 10% of the purchase price (often under the yield on the funds used for the purchase), and then ultimately increase to well above the 10%. This results from your purchasing future profits but not being permitted to take future profits into your statement until they are realized. How this dilemma of ultimate increases in earnings per share versus near term decreases in such earnings is resolved will depend on such factors as the relative size of such changes, the expected responses of the corporation's stock price to changes in earnings per share, and the importance of the acquisition to the corporation. For example, if a corporation wanted a higher proportion of their earnings to be derived from life insurance, as opposed to, say, P&C insurance, it would be more inclined to suffer the early declines in reported earnings. Of course, if the investment community applied a higher P/E ratio to life than to P&C earnings there might be no resultant fall in the market value of the corporation's stock.

I will now turn briefly to the question of funds utilization within the life company. As I said earlier, our life company has been very well capitalized since its start and thus we have never experienced competition for scarce financial resources among the product lines. Note that I said financial

resources. We find the competition is usually for personnel resources, both for people to carry out work and for management attention. But, that is a whole other area of management which is not a proper subject for this panel.

Even when financial resources are not scarce, there are at least two factors that should be taken into account in determining whether funds should be made available for a specific purpose. First, is the impact on Federal income tax. For instance, will success (or failure) in the venture place you in a different tax phase? If two proposed ventures, when considered together, will cause you to transfer to a less favorable tax position you may well have to proceed with only one of them, even though funds are available for both and the after tax return of each, considered separately, is acceptable. An obvious example would be the projected expiring of tax loss carryforwards.

Another factor that can cause a choice between competing uses, even though funds are available, is the effect on statutory surplus, where marked decreases can cause questions to be raised by regulators and by others. Single Premium Deferred Annuities and the accompanying reserve strain are a recent example of this in many companies.

Under the heading of Topic 3 (Enterprise Risk Exposure and Management) I have a couple of examples (both involving annuities) which illustrate areas where risk exposure is not very obvious and thus where the management of the exposure is more difficult. The first concerns Single Premium Deferred Annuities and the second, Investment Annuities.

The Single Premium Deferred Annuities I shall be discussing are usually non-participating but credit a relatively high rate of interest, which is set annually in advance by the company. Sometimes there is a front end load so that the interest is credited on less than the full amount paid in by the policyholder, but more often there is a declining surrender charge which may go to zero at the end of 5 years or so or may be continued forever by having the cash surrender value always less than the amount that would be applied to determine annuity payments.

The problem of risk exposure and management arises from the philosophy employed by the company to determine the rate it will credit each year. To best describe the problem it is necessary to use some actual numbers. Assume that high quality long term bonds are yielding 8%. Also, assume that the company requires a  $1\frac{1}{2}\%$  spread to cover maintenance, profit and contingencies and the amortized cost of acquiring the business. In that case they will offer the product at an initial credited rate of  $6\frac{1}{2}\%$ .

What happens if high quality bond yields move up from 8% to 10%? The company has basically two choices. The first is to continue to credit  $6\frac{1}{2}\%$  plus a small increment to reflect the reinvestment of earned interest at the higher market rate, and the second to credit close to  $8\frac{1}{2}\%$  (10% less the  $1\frac{1}{2}\%$  margin).

What are the implications of the two alternatives? First, if the company credits just over  $6\frac{1}{2}\%$  it will continue to earn its expected margin and profit. But will the policies persist? Recognize that another company, new in the business, can now come along and offer essentially the identical annuity contract, but paying  $8\frac{1}{2}\%$  rather than  $6\frac{1}{2}\%$ . The terminating policyholder will usually have to pay a surrender charge to cash out his  $6\frac{1}{2}\%$  contract but such charges generally do not exceed 5% or 6%. With a 2% differential in interest credited he would cover this surrender cost in 3-4 years and thereafter earn

2% more every year. If it was left up to each individual policyholder to make this decision, many might fail to do so, out of either ignorance or inertia. But, there will be agents around who will earn new commissions on the replacement and can honestly convince themselves that the replacement is in the policyholder's best interests. Therefore, I believe that a substantial percentage of policyholders would drop their old policies. What is the implication of this for the company? Effectively, it means that it has to sell bonds in a down market suffering capital losses of 10-15% of book value.

This is obviously an untenable solution. Therefore, what about the second alternative where the company increases its credited rate to close to 8%. Now the policies persist but where does the company get the earnings to be able to credit the additional 2%? There is only one answer - from either the stockholders or, if there is participating business in the company, possibly from life policyholders by reducing the investment income available out of which to pay policy dividends. I suggest that this alternative also does not present an acceptable solution unless the assets supporting the annuities are very small compared to the company's total assets.

At this juncture I should acknowledge that interest rates can go down as well as up. Obviously, in this situation the company stands to gain since it can afford to reduce the credited rate with no fear that the policyholders can run elsewhere for increased yield. Therefore, if you believe that any significant move in interest rates is more likely to be down than up from present levels, it might be a good risk for the company to run. But, recognize the significant risk exposure involved.

Is there any way the company can manage this risk? I suggest there are two. The first is to sell Variable Annuities rather than Fixed Dollar Annuities. The Separate Account would contain the same investments as did the General Account but the cash-out values would reflect the market value of the bonds at all times. The same protection could be obtained by providing for, in the fixed dollar policies, very substantial surrender charges if policies were terminated in a down bond market. But such protection may not be possible under Single Premium Deferred Annuities because of state nonforfeiture and policy provision laws and regulations.

The other method of managing the capital loss risk is to design a formal program of transfers between the non-participating life insurance and annuity accounts. If yields go up, the life insurance account subsidizes the annuity account and vice versa. The effect of this is to guarantee current yield rates on future life insurance premiums, a result I suggest is desirable only when yields are relatively high.

I realize that this discussion has been rather tangential to the assigned topic. However, it is, I hope, a good example of risk exposure and management.

I could spend hours talking on the subject of Investment Annuities since I have been up to my neck, and sometimes over my head, in this product for the past two years. But, I merely want to use Investment Annuities as an example of unexpected risk exposure.

Until mid-1976 the IRS was issuing private rulings that confirmed that Investment Annuities were to be taxed the same way as were other Variable Annuities. Specifically, this meant that the policyholder did not have to report any income earned on the underlying assets until such income was distributed,

either in a lump sum or as part of an eventual annuity payment. This tax deferral feature was very important in the sale of Investment Annuities and was described in sales pieces and sometimes in the policies themselves. The IRS stopped issuing private rulings on Investment Annuities in mid 1976 and has recently published Revenue Ruling 77-85 which denies the traditional annuity tax treatment to Investment Annuities. Fortunately, the IRS did agree to grandfather existing contracts but for a while it was touch and go as to whether grandfathering would be granted. Can you imagine what would have happened if the earnings on the contributed assets had suddenly become taxable? We would have had many requests for recisions, very unfavorable policyholder relations, and probably lawsuits claiming that we should pay the required Federal income taxes because the policies had been sold on the basis of the tax deferral benefit. I think you would all agree that we were certainly exposed to a substantial risk.

But apparently some companies did not appreciate that we ran such risks. Investment Annuity policies all charge an annual premium of around  $\frac{1}{2}\%$  of the assets. This is designed to cover maintenance expenses, mortality guarantees, other risk charges and profit. One company came out with a policy that reduced the charge after 10 years to  $\frac{1}{4}\%$  with a minimum of \$100 and maximum of \$500. We came under pressure from our marketing people to adopt a similar schedule in order to make our policy more attractive for the large amount sale. I was able to see the logic of a reduced percent of charge for larger policies because our expenses are basically all per policy and independent of size. But I could not see receiving no ultimate compensation on amounts in excess of say \$200,000. Obviously, there was the mortality guarantee but I was not too worried about that. I had in the back of my mind that there were risks, primarily in the tax area, associated just with providing the product, and those risks were proportional to the size of the case.

The point is that there are always unknown risks and we must expect reasonable compensation for accepting them. In the case of Investment Annuities, it has so far turned out OK but the next one may not.

In concluding, let me challenge your thinking for the question and answer period with the following. What is your risk exposure and management philosophy with respect to:

1. High rates of inflation with their effect on maintenance expenses.
2. Substantial increases in premium tax rates or the instituting of new forms of taxes.
3. Significant changes in the Life Insurance Company Tax Act.
4. Substantial decreases in annuitant mortality.

And these are the unknowns, the so-called UNKS. What about the UNK UNK'S?

MRS. DAPHNE D. BARTLETT: I was interested in Gary's comments about risk exposure and in Herb's comments and those of some of the other panelists about Federal income tax planning. I am wondering whether the risk of reaction by the IRS, in their dramatic manner, and the other risks that Gary mentioned are things that we should be reserving for. I am not suggesting that we do, or are these the kind of risks that are the reason that we are trying to get a 15% return on our equity?

MR. CORBETT: You must reserve for unknowns by retaining sufficient surplus. You are not generally permitted to reserve for unknowns "above the line" but if your policy reserves are redundant you can certainly look to such redundancy as well as the retained surplus to meet financial losses from unpredicted occurrences. The actuary must be constantly on the lookout for the nonapparent dangers that might impact the company adversely now or in the future. I gave examples of two such dangers in my prepared remarks. Generally speaking, if the actuary does not point out these dangers, no other member of management is likely to do so. The actuary is in the best position in management to play this role, both because of his training and his position in the company.

MR. DEPRENGER: Mr. Hill, could you describe your knowledge about insurance industry practices relative to more formal capital budgeting processes in comparison to the way it is used in industrial corporations?

MR. HILL: I can only talk in terms of insurance lines of business, not non-insurance lines. I do not think there has been much done yet in the industry as a whole--it is pretty much virgin territory. In my prepared remarks I was speaking of capital budgeting in the sense of determining your expected results on a scientific basis--using computer models to come up with scientific expected numbers for mortality, surrenders, etc. and, maybe coming up with different alternatives for new business production since this is an area that is outside the actuary's direct control. It is an area where an awful lot of work has to be done which is the type of thing I meant--coming up with a scientific budget and then being able to compare to the actual results on the same scientific basis.

MR. DEPRENGER: Assuming you did not have any excess surplus, how do you determine an appropriate shareholder's dividend?

MR. STEVEN A. SMITH: In determining an appropriate shareholder's dividend, the company has to look first of all at statutory (SAP) rather than GAAP earnings because dividends cannot be paid out of deferred acquisition costs. On the other hand, shareholder dividends should also be related to GAAP income since that is what is reported. The "target pay out ratio" cannot be determined just by relationships to recent SAP or GAAP income or to projected GAAP income. A comparison must also be made to both projected SAP income and SAP surplus.

Last year my company had a 50% increase in new business. The high acquisition costs caused a drop in SAP earnings. GAAP earnings, on the other hand, were good. We paid out stockholder dividends of about twice the amount of SAP earnings. A pay out ratio of this magnitude obviously could not continue indefinitely. Less obvious would be the fact that a target pay out ratio of say 50% of GAAP earnings might deplete statutory surplus to zero in 5 or 10 years during a period of rapid growth.

The point is that in deciding on a target pay out ratio, it would be a good idea to use a model office to project SAP and GAAP balance sheets and income statements for say 10 years, trying different levels of stockholder dividends to see what is possible and what statutory surplus levels result.