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INVESTMENT POLICIES OF LIFE INSURANCE COMPANIES

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MR. EDWIN L. INGRAHAM: Today our biggest problem is that the demand for investment funds is huge in every area, and the supply of money is small and seems to shrink every day. As a result, our approach to the issue for discussion today is quite different from what it was even two years ago. Structuring portfolios for an ever increasing cash flow was much simpler than planning for a stable or even declining cash flow. We must also be constantly preparing for a reversal of those trends as this cycle will also change. I will now show the differences in the planning and selection processes between a company's investment of its own regular cash flow and of its pension plan money. Pension plans will be limited to Investment Contracts and Fixed Income Separate Accounts.

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1. Selection considerations for making individual investments.

Quality:

The quality of each investment in the Company Account should meet both the legal requirements of the state of domicile and the minimum portfolio requirements. We would stress higher quality in the current economic environment because of the availability of very good rates even on the highest quality issues. For the Pension Account, state quality requirements must be met for investment contract money and also for Separate Accounts if either the rate or principal amount is guaranteed by the company. For other Separate Accounts, quality must meet ERISA requirements (the prudent man rule). High quality should be stressed to the extent possible.

Yield:

It is important to have a good continuity in the trend of net yield on invested assets for the Company Account. To minimize the volatility, we push hard for the best possible yield on each investment in years where the general rate level is low. This is done by stressing private placements and lower quality investments. Investments are then upgraded when rate levels are higher. Our objective for the Pension Account is to meet or exceed the competition and any guaranteed rates in the contract. If this cannot be accomplished within reasonable constraints of safety, we would lower our guarantees even though sales of the contracts would be restricted.

Maturity:

The maturity objectives of the regular Company Account should be lengthened when the rate level is high and shortened in the low rate cycles. The pension investments should maintain a relatively short average life or try to match the maturities of each contract. If neither of these can be done while achieving the needed yield, the maturities can be stretched while attempting to stay as liquid as possible.

Liquidity:

While liquidity is an element to be considered in negotiating the yield needed on any individual investment for the Company Account, it is not one of the more important elements as long as there is sufficient liquidity in the total portfolio. Liquidity is not a highly significant requirement for pension investment contracts. We prefer marketability for Separate Accounts because of the possibility of early redemption and the many legal and business obstacles to getting company money into the Separate Account to fund the redemption. While we do have private placements in one Separate Account, we were willing to accept the risks because it met other corporate needs.

When selecting an investment for a Separate Account, it is important to be aware of the identity and size of participation by all Separate Account pension clients to make sure that all ERISA requirements are met if the new investment is made.

2. Factors affecting composition of portfolios.

Quality:

For most large companies the quality of the investments in the Company Accounts is a function of staff expertise, cost, and size of reserves and surplus versus the extra yields available. For Northwestern National Life Insurance Company, the long term objectives are twenty-five percent high quality, fifty percent medium quality and twenty-five percent lower quality. The lower quality is only acquired when spreads are realistic or a significant equity kicker is available. The Pension Accounts use medium and high quality only. This reduces volatility and improves liquidity.

Yield:

For the Company Account, close attention must be paid to the yields available versus quality for the various types of investments such as bonds, preferreds, mortgages, or real estate. Competitive conditions change rapidly. You should not stick blindly with year-end allocations and budgets. Mortgage rates frequently lag going up and lag going down. Flexibility should be available. For Separate Accounts the stated objectives or purpose may reduce flexibility of choosing between alternate forms of investment. Therefore more attention will have to be paid to varying maturities and quality to achieve yield objectives for each portfolio.

Maturity:

The Company Account must allow for normal prepayment activity in mortgage and private placement portfolios in structuring maturity schedules. Most commercial mortgages now have an optional call after fifteen years. Maturity schedules for each type of investment should be blended to achieve overall corporate objectives. These objectives might include large projected cash needs at certain times for items such as a new home office, an acquisition, or large concentration of investment contract maturities. Close cooperation and communication is needed with the Pension Department to ascertain the length of time of the rate guarantee and the restrictions on the timing and pricing of withdrawals.

Liquidity:

Company Account portfolios of mortgages, real estate, and private placements are relatively illiquid. This is offset to a large degree by a steady return of cash through principal and interest payments. The amount of short terms and marketable securities held should be weighed carefully against the amount and timing of forward commitments, the company's exposure to policy loans and pension fund sales and redemptions. A much higher degree of liquidity is required for the Pension Account because of lower confidence in the continuation of new cash flow. In some states selling investments back to the General Account may be improper. Thus, if illiquid investments must be acquired in a Separate Account, the company must be prepared to buy units in the account to provide funds.

3. Investment philosophy during high inflation.

Inflation affects both cash flow available for investment and the quality of investments. High inflation leads to high interest rates. The availability of high interest rates increases policy loans and surrenders. This is compounded by the fact that high interest earnings help lower ordinary premium rates so that a new policy is often cheaper than a similar old one. As inflation is escalating, short rates tend to be higher than long rates, thereby encouraging corporate treasurers and others to invest in short terms rather than in Guaranteed Investment Contracts. Group health cash flow is impaired by accelerating the trend away from front-end cash reserves, slowing collections. Operating costs increase. Refundings of old investments decrease. Our only salvation would seem to be that inflation should increase everyone's insurance needs. That is good in the long run, but if ordinary sales grow, there goes more cash flow!

The direct impacts on present and proposed investments are many. As interest rates increase, the required return from common stocks increases. Unless buyers are willing to assume that corporate earnings will increase at least proportionately, prices will go down. Market prices of bonds and preferreds also go down to reflect the new yield levels. The most lasting damage is done to the credit-worthiness of the insurers. Many companies do not earn ten percent on their capitalization. Very few companies earn the twenty percent needed today to cover the cost of borrowing for growth of plant or inventories. Once you stop growing you start dying. The interest rate limits of usury laws and other regulations create instant depression for many industries such as homebuilding, consumer finance, savings and loans, and many others. While new construction is held back by the high cost of money, existing good real estate increases in value because of inflation. Nevertheless, the cost squeeze on developers and owners tend to increase delinquencies, and makes repossessions more difficult to sell unless we provide the financing.

Since we believe that relatively high inflation will remain for a least a few more years, we have had to make various modifications in our investment policy. Because of the low predictability of cash flow, we have reduced our level of forward commitments, and believe we must keep them lower in the future. The commercial mortgage backlog particularly must be watched, since those commitments run forward so far, and if cash flow declines sharply they can absorb the bulk of cash flow and distort desired balance. We must increasingly look at our borrowers' capability of increasing their earnings with inflation, and are asking for hard security on virtually all private placements.

We are stressing those industries owning scarce natural resources and companies serving those industries. To the extent that many are capital intensive, we look for a high level of internal cash generation. We believe that the next year or two will be a good time to acquire real estate, and would stress properties not encumbered with long term leases. We will also be looking for "equity kickers" on mortgages and private placements to be able to get some participation in the revenue growth caused by inflation.

Owning common stocks should be very profitable during the eighties, but not to buy and hold or have a "dollar averaging" program. Stocks in general are not cheap because they are undervalued "real assets". Investors will still require a comparable real income from their investments and the asset values are only available in a sale or liquidation of the business. Market timing and stock selection will be the key, as it was in the seventies. If this approach becomes more commonplace, market volatility and impact on individual investors will be great.

MR. JOSEPH F. CROWE: The interrelationship between investment policy and pricing is a particularly timely topic. Product innovations that have occurred in recent years combined with the extreme fluctuations of the financial markets have raised this question to a high level. This relationship is two-way and there is a need for ongoing contact between investment people and actuaries. There are a number of specific products listed in the program that illustrate the types of products where special investment policy may be required.

The following items can be considered when looking at either insurance company products or investments which insurance companies may be considering:

- 1. Length of the contract or commitment
- 2. Guarantees involved
- 3. The cash flow risk
- 4. Regulatory restrictions/requirements
- 5. Degree of risk

It is important that these items as well as items that may be peculiar to the products or investments be compared for consistency. Obviously, each investment will not exactly match the policy producing the cash for the investment, but it is important as a minimum to avoid serious distortions. For example, if all money available for investment were to cover liabilities under short term Medical Expense policies, it would be undesirable to invest all that money in twenty-year private placements with no sinking funds.

Few, if any, companies are one-product companies and, in practice, the investments will be backing a number of different products, so that some balance will have to be met. It is very important not to assume that risks will tend to offset one another with a mix of products so that a mix of assets can be developed without trying to relate investments to products. Different products can develop liquidity shortfalls simultaneously.

The following are some products which might require special investment consideration:

1. Retired Life Reserves

The retired life reserve product has a payment which is made each year which will accumulate to buy a certain amount of a post retirement insurance for each employee. The employee has no withdrawal rights. With the exception of case termination, the risk of withdrawal is significantly less than in most policies. The specific needs of the policy are many years out

in the future. In this case, it would seem appropriate, subject to ongoing perceptions of the investment environment, to invest money for long periods of time in the traditional life insurance type of investment. One thing to monitor here for the block of retired life reserves is the distribution by age of the policyholders over time.

As money will be accumulating for future use, it may be desirable to give policyholders options for accumulation. For example, in addition to the traditional General Account, other options such as Stock, Real Estate or short term Separate Accounts may be desirable.

2. Single Premium Immediate Annuities

For immediate annuities with an implicit assumption of a long term interest rate, it is important that money be invested for the anticipated duration of the annuity contract at a rate consistent with the assumption in the purchase price itself. Since the company's obligation is discharged over time, to develop an investment that has a cash flow very closely matching liabilities, investments for periods of approximately thirty years with gradually increasing sinking fund payments would seem appropriate — for example, mortgages or mortgage-backed securities.

3. Single Premium Deferred Annuities

This product offers a unique opportunity to illustrate the importance of coordinating product and investment decisions. Assume that two companies have Single Premium Deferred Contracts which have relatively low guaranteed interest rates, but current credited rates reflective of "new money". Assume that Company A has a contract that has a market value adjustment on surrender and Company B has a nominal surrender charge. How might the investment policies of the two companies differ? Company A would be inclined to lock in at new money rates for as long as possible, particularly while they appear to be high. If rates go up further, the market value adjustment would tend to discourage surrenders. If rates go down, the rollover new money rate should become increasingly attractive. (Will the company allow the market value adjustment to be negative?)

What about Company B? A policy of investing in intermediate term investments of three to five years has merit, particularly at a time when return on these investments compares favorably to return on longer term investments. At time of issue this policy would enable the company to offer current new money rates comparable with companies such as Company A. If rates increase in the future, Company B can respond because of the rapid turnover of its portfolio and keep a credited rate that is relatively current—certainly higher than Company A.

To the extent that surrenders do occur in this environment, the relatively short life of the investments would dampen market value drops and minimize market risk. If interest rates fall, while Company B's credited rate would likely fall more than Company A's, it would be competitive with then current new money rates and should assure favorable surrender experience.

It is difficult to argue that it is not in the company's and policyholder's best interest to lock into long term investments where rates are at historic highs. It is very difficult to project future rates, however, and historic highs have been surpassed a few times in the last decade.

4. Guaranteed Investment Contracts

While there are a number of variations in guarantees, it is common to guarantee an interest rate for a set duration at the end of which time the book value is guaranteed. Substantial amounts of money can be involved in individual cases. For example, the policyholder might deposit ten million dollars with an insurance company and receive a guarantee that interest at the rate of ten percent per year will be credited for ten years and at the end of ten years the full accumulated value will be paid to the policyholder. In that case it seems particularly important to match the investments with the contract. Specifically, the ten million dollars would ideally be invested in a ten-year security paying at least ten percent with no sinking fund. Even here there may be some risk relative to the reinvestment of investment income received. Graduated payment mortgages or bonds purchased at a discount would tend to minimize this reinvestment risk.

Product modifications can help to reduce risk. For example, instead of full payment after ten years, ten percent per year for years six through fifteen can spread the payout risk. Because of the larger amounts of money invested, it may make sense to use a Separate Account to fund these contracts.

5. Deposit Term

Deposit Term is a contract form that has evolved over the years, and my comments will relate to the early form where there was no cash value at all available for, say, ten years. At the end of ten years, the original deposit made when the contract was sold would be paid (or redeposited) with accumulation to reflect interest and some assumed lapse rate. This accumulation would only be available to policyholders who had kept their term policies in force for the full ten years.

Investment considerations are very similar to those in Guaranteed Investment Contracts. Rather than a small number of large contracts, however, with Deposit Term one would expect a large number of small contracts. For all Deposit Term contracts sold in a particular year, accumulated payments will be "due" in ten years. If redeposits at the end of ten years are to be offered at then current guarantees, ten-year investments would seem appropriate. If the guaranteed accumulation rates or "redeposits" are in the original contract, some lengthening may be desirable.

6. Policy Loans

Policy loans present some challenging questions. From a product point of view, if policy loans are to be available at eight percent does this place a maximum on the interest rate that should be assumed in pricing? Note that the eight percent policy loan rate is a particular case where regulatory restrictions impact the investment process. While the gap may have to be wide, we have seen recently that when a large enough gap exists between the policy loan rate and generally prevailing rates, the policyholders will borrow money. To the extent that this occurs, insurance companies and their policyholders will tend to have their portfolio returns lowered because they will be investing relatively more when interest rates are low and less when rates are high.

A related question that must be considered is the degree to which the forward commitment process is used. When interest rates are historically high, cash flow will drop and there will be a tendency to cut back commitments. In addition, investments made in these times will be at lower, previously committed rates. If commitments are restarted when the cash flow picks up again, the company will have missed investing at the peak rates. Would it not have been better able to capitalize without that heavy use of forward commitments?

For the future, change will be a continued way of life and flexibility will be extremely important in determining which companies prosper. In our particular concern, flexibility in contracts and investment options will be important. We have seen some stock companies offering contracts with premiums that can fluctuate. There has been a shift to term and away from guaranteed cash values. In the investment area, there may well be thought given to maintaining a short term position on an ongoing basis so as to maintain flexibility and responsiveness. The intermediate term investments for single premium annuities will likely become more common. There is increased talk about flexible rate mortgages and floating rate notes.

A new dimension has been added to investment/product considerations. In addition to a consistency of products and investments and implicit or explicit projection of interest rates, product obsolescence and replacement must be a conscious consideration. Is it wise, in making asset share projections, to assume "normal" persistency for twenty years? What happens if all (or half) of our existing policies terminate at one time to be replaced by new contracts? Is it wise to make investment decisions that ignore the risk of product obsolescence? Questions like these present a challenge and also imply that the insurance industry will continue to be exciting in the years ahead.

MS. JANE TEMPLE: A number of factors have contributed to increased interest in investment performance. While I intend to concentrate on General Account policy, the first factor was undoubtedly the development of Separate Account business in the life insurance industry. As many financial and pension people are painfully aware, investment performance -- with what seems to be all too short term a perspective -- is of major import to Separate Account business.

Within the General Account, increased interest in performance can be traced to the move to generation or investment year accounting in the 1960's (as a way to compete for pension business), through the introduction of Guaranteed Investment Contracts in the 1970's, and, most recently, to the use of incremental pricing of these contracts. The pension product increasingly has become an investment product, and the industry has sought to compete — or had to compete — in the current investment market. The major factors inducing these changes in pension policy have been generally rising and increasingly volatile interest rates. Rising interest rates have also contributed to greater concern for investment performance from the individual side of the house. Not only does net investment income play a relatively greater role in pricing/dividend policy, but rising interest rates have also increased competitive pressures on traditional life products. At least one major company has shifted to a generation year basis in its individual business — a policy decision reflecting current investment market competition.

How do we measure investment performance? We can define performance as the rate of return, including income and capital gains and losses, after deducting all related expenses and taxes. The variability of return, or risk, should be considered simultaneously, along with the time horizon over which both the performance and risk will be judged.

With Separate Accounts — excluding here any guaranteed benefit accounts — the client is generally looking for relatively short term performance — quarterly, annual, or perhaps as long as a market cycle. Within a given account, the time horizons for all clients are likely to be relatively similar. There are generally accepted methods of measuring performance and risk and, for publicly-traded stocks and bonds, there is little difficulty in doing so or in making comparisons with competing funds. As clients have become more sophisticated, they are looking for performance within particular risk parameters, and comparisons can be made on this basis. For direct placement, mortgage or real estate accounts the main question is reasonable market valuation and assessing default risk. Given faith in the market valuations, however, inter-fund comparisons of performance can be made. It is usually not too difficult to estimate what time horizons matter to the clients in a given account.

In contrast to Separate Accounts, useful, reliable, consistent General Account investment performance data is difficult to come by. Measures are available, but each has inherent limitations and comparability problems. Taken all together, however, there is useful information. General Account clients - all within one account - may be looking for performance over a time horizon ranging from one year to many, depending on the product. These differing time horizons will affect the willingness of each client to accept certain tradeoffs such as immediate income versus long term, possibly more valuable, appreciation, his acceptance of risk, or the degree to which market valuation has meaning. The client may be concerned about total portfolio performance or he may be concerned about generation year performance. With a nonpar product the client really only cares about total company solvency, but then the client should be considered the company surplus, or the surplus of particular lines of business within the company. The clients will face significantly different tax rates and, therefore, desire different mixes of income and appreciation in performance.

The complexities of setting an investment policy and, subsequently, interpreting results with such a diverse set of goals has resulted in increased segmentation of traditional General Accounts through subsidiaries, guaranteed benefit separate accounts, segregation of assets within one account by product line, and so forth. These moves should help clarify investment goals and performance tracking.

For the remainder of the discussion I will look at a single General Account serving a variety of product lines. For most General Account investments, particularly in mutual companies, market valuations are not made. When they are estimated, they are generally not publicized. If they were, and could be considered reliable, performance measurement would be remarkably easier. With certain exceptions, for portfolio performance one has to look to an NAIC-type rate of return on book value. A particular company can calculate any kind of rate of return it wants on this basis — gross rates, net rates, rates including or excluding net gains, rates by investment type,

for the total portfolio, for a given generation year, by line of business, using mean year-end assets, or using monthly average assets. Without market valuation, measures of risk don't have much meaning. Default risk, of course, can be estimated based on experience.

The problems come in comparing whatever performance rate one calculates to anything else. Each company is required to file a net rate of investment income a la Exhibit 2 of the Annual Statement. This rate is for the total portfolio, net of investment expenses, depreciation, and some taxes. The rate is before Federal taxes and net capital gains, although one can recalculate rates for any company net of these hoping there are no Phase 2 tax companies in the lot. First, since published NAIC rates are for total portfolios, they are dependent on the mix of assets. Rates of return for each company can be calculated on a gross basis with available data for each investment type. In some ways these gross rates are preferable to net rates, because different companies allocate relatively more or less expenses to the investment line. This kind of analysis can be enlightening as to the sources of total rate differentials. Second, the published rate is a portfolio rate also dependent on the asset growth of a company during periods of rising or falling interest rates. Hence, the higher growth companies have had higher portfolio rates in recent years. While this is important, the reason may not lie in investment performance. Third, only rough estimates can be made from available data for the rates of return for particular lines of business within one company. Finally, differing accounting practices and certain unusual timing effects in the formula make comparisons tricky.

The American Council of Life Insurance has instituted a new survey on investment return which is attempting to alleviate some imcomparability and usefulness problems associated with the NAIC rate.

On the risk side, only limited comparison information is available in published data. Experienced gains and losses are deceptive. One would like to know how much is what we call "planned" — usually for tax purposes. Measures of NO bonds, preferred stocks not in good standing, non-admitted income, and so forth available in annual statements give questionable clues.

To fill in some of the gaps just mentioned concerning the use of published portfolio rates, there are available the so-called "New York New Money Rates" which many companies exchange through the American Council of Life Insurance. These rates, while not perfect, probably suffer less from comparability problems than NAIC rates. They are expected internal rates of return for investments acquired in the most recent year, are on a gross basis, and provide breakdowns by type of investments. The rate is important since it represents a major portion of the new money rates quoted on pension products, and its usefulness is enhanced by its ability to be compared with other rates available, for instance in the public market.

When using a new money rate to measure how well an investment operation is doing relative to the competition, it is important to keep in mind that the rate is dependent on the degree to which a company advance commits its funds in periods of rising or falling interest rates, and within one's own company, who makes that decision. The published rates also lack data on

maturity, quality, equity kickers, equity investment in general, BA schedule investments (which often have high anticipated yields), and the extent of tax performance investing in not completely clear. All of these factors create difficulties in trying to segregate the causes of rate differentials.

The yield on new acquisitions is also dependent on the yields on new commitments. Through a couple of industry surveys — one for direct placement bonds and one for commercial mortgages — we can compare our commitment rates to others, although not on a company-by-company basis. There is also some information on the surveys as to industrial classifications and quality ratings.

With all the caveats mentioned, we still would like to be able to set goals for investment performance and have something against which to measure these. With the Separate Accounts this has not been too difficult, but with the General Account it has been more so.

Looking at goal setting in the order of the General Account investment process, first, commitments are made. Yield goals may be set in terms of the competition, including public market yields. Risk, maturity, investment mix parameters must also be determined. Some industry commitment comparisons are available but these are extremely limited. Public market comparisons are readily available, however.

Next, investments are acquired. A company goal might be to be consistently in the top third of the competition in rate. In trying to determine reasons for meeting or not meeting this goal a variety of factors must be examined: investment mix, commitment timing, cash management policy, setting of investment guidelines rates, actual commitment yields as well as who is responsible for each policy and how it has effected the company rate as opposed to the competition. Defining the competition can be no mean task. "New York New Money Rates" and public market yields are useful here.

Commitment and acquisition rates do not measure actual performance. There is really little to measure how well the investment officers have done. Ideally, we would have measures of expected versus actual rates of return available for each investment, for investment types, for each generation year, for the entire portfolio, whatever way we wanted to see it. We would like to be able to pinpoint the reasons for the deviations. We cannot do this without spending a great deal of money. Pieces of this sort of analysis are done, however. And it may be that, with the increased competitive pressures all product lines are feeling, more and more will appear justified in terms of cost.

