Chapter Six

Problems of Life Assurance

6/1
Preface

Annuities and life insurance contracts with cash values are instruments through which one may develop plans for the accumulation and distribution of property, a process often referred to as estate planning.

Life insurance is often sold as a long-term savings plan to build an estate.

Before analyzing the advantages and disadvantages of life insurance and annuities as a long-term estate building program, let us examine the nature of major problems and needs of any effective long-term savings plan.

6/2
Problems of Long-Term Savings

Success in long-term savings is usually more difficult to achieve than in short-term savings because of the existence of many problems whose solutions are often beyond the capability of an average individual without special guidance**. These problems include:**

1- Providing a certain amount even thought it is small, for regular savings.

2- Investing these savings in such a manner as to achieve reasonable safety; in judging safety, the fact that we are dealing with long periods of time should be considered, and hence investments that appear safe today may not be so in five years**. Thus, there is a need for constant review and careful investment management.**

3- Investing savings so as to achieve reasonable liquidity; again, since long time periods are involved, it is not necessary all that accumulated savings be made in investments that may be turned into cash at a moment's notice. Such a high degree of liquidity is usually

(but not always**) as associated with a relatively low interest rate.**

Of course, a certain portion of savings should be in a highly liquid form so as to provide emergency funds when needed.

4- Making investments so as to achieve as large a return as is consistent with safety and liquidity; it is usually agreed that safety and liquidity should not be sacrificed to any great extent **for the sake of a high promised return. This is not to disregard return as the least important of the three elements.**

A small difference in the interest returns makes a substantial difference in retirement income over a long period of years.

5- Developing sound plans for use of the savings so as to achieve the desired objectives, such as making provisions for dependents and for one's old age**. Problems in this area include the development of wills, trusts and plans to minimize taxes.**

To insulate the estate from common investment perils, to minimize estate settlement costs, and to provide sufficient flexibility in the administration of an estate so that if conditions change after the estate planner is deceased, the plan may be altered according to the needs of the beneficiaries.

6- Securing protection against inflation; steady deterioration of the money over the long

periods characterizes all industrialized economies, some more than others, before World War II, for example, it was thought that \$300 a month in the United States for life would provide a comfortable retirement. Over the period 1940-1979 the value of the dollar declined approximately 80 percent, so that \$300 would provide only about 20 percent of the purchasing power anticipated at retirement**. Long-term savings programs should be protected against this deterioration insofar as possible. Unfortunately there is no universally accepted way to achieve this protection, and even those methods thought to be the best (**e.g. purchasing common stocks on a regular basis**) have not always worked satisfactorily.**

6/3
The Life Insurance Method for Long Term Savings

Among the advantages and disadvantages of permanent life insurance as a way for long-term savings, the following are cited:

1- The purchase of life insurance lends itself to a regular, consistent savings plan since it may be purchased in any denomination to fit the savings budget of individuals with varying incomes.

The plan fits the psychological needs of most savers for a regular savings plan with a semi-compulsory flavor.

2- The safety record of the life insurance investment has been above reproach. The probability of loss to policyholders from life insurance company failures is so close to zero as to enable an evaluation of the risk as negligible.

3- The liquidity of life insurance investment is guaranteed by contract. The only qualification is that the policy contains a delay clause which gives the insurer a period of six months or less, if necessary, in which to make a cash loan for a purpose other than payment of the premium.

While the insurer seldom invokes this clause, it is there as a precautionary measure in case of repetition of a run during a financial panic similar to that which occurred during the depression of the 1930s.

4- The interest return on the life insurance investment is conservative. The policy generally guarantees a minimum rate, such as 12 percent but the policy holder will usually received a greater return through dividends. Still, studies reveal that unless the life insurance policy is held for relatively long periods, such as 20 years or longer, the return is usually less than what can be obtained on other investments of comparable safety.

5- Life insurance facilities development of sound plans to distribute an estate to beneficiaries. For example, settlement options give the insured flexibility in arranging income flows to those needing regular income for varying periods. Lump sum needs, such as funds for estate taxes and debt retirement**, can be economically provided for.**

Protection of the estate from creditors' claims is possible through life insurance. This subject is amplified below.

6- Unfortunately, life insurance generally provides no inflation protection when all obligations and benefits are expressed in a fixed

amount of pounds. These pounds tend to decline in purchasing power over time.

Recently, however, life insurers have introduced variable annuities and many are preparing variable life insurance contracts designed to help the offset inflation. These contracts are discussed below.

6/4
Fixed-Pound Investments and Inflation

We have examined the investment advantages and disadvantages of life insurance and annuity contracts as long-term savings methods from most viewpoints, except how well they serve in an economy which in the past had been characterized by long-term inflation. This is obviously an important consideration.

Life insurance and annuity contracts give no inflation protection in the usual since of the word.

The savings in these contracts, being invested largely in bonds, are protected against deflation, but not against inflation.

6/5
The Inflation Peril

6/5/1 Insurance Methods to Offset Inflation
6/5/2 Employer-Sponsored Annuities
6/5/3 Variable Life Policy
6/5/4 The Variable Annuity

How serious is the peril of inflation in robbing the fixed-power investment of its purchasing power? A measure of this threat may be observed by noting the rise of price indexes.

Another way to understand the relationship of inflation to retirement is to examine the real (price adjustment**) value of a given retirement income over varying periods at different rates of inflation.**

6/5/1 Insurance Methods To Offset Inflation

Various solutions to the problems of long-term inflation and its negative effects on long-term savings have been explored.

There are several methods currently in use in the United States to help the long-run saver offset inflation:

First: Social Security provides for automatic adjustments in old-age retirement benefits for changes in cost of living. The government also offers certain tax incentives for long-term savings.

Second: many employer sponsored retirement plans have benefit formulas connected to wage changes. To the extent that wages keep pace with inflation, the corresponding retirement annuities will also be increased.

Third: both life and non-life insurers have developed new policies and methods to help meet the inflation peril.

6/5/2 Employer-Sponsored Annuities:

In 1979, over 50 millions persons in the United States were covered by group annuities of different types, both public and private. This was slightly over half of the labor forcing that year and the number has been rising steadily. In 1940 less than a fifth of all employees in private industry had pension plans**. These plans, together with individual plans and social coverage’s, form an important part of the base of most people's retirement coverage.** For example, in 1977 about 8.1 million retirees received benefits from employer-sponsored plans, plans compared to about 20.8 million workers who received OASDHI retirement benefits.

Inflation protection under employer-sponsored pension and annuity plans is achieved in two major ways:

First, many plans have benefit formulas based on covered wages and length of service. A common method, for example, is to provide a pension equal to years of service times 1.5 percent, times the average wage in the five highest years in the ten years before retirement**. Since wages tend to rise with inflation, a person's income is likely to be based on some realistic level at the time of retirement. Thus, if a person has worked 20 years under the above arrangement, the amount received will be 30 percent (20 x 1.5) of the final salary from the employer-sponsored plan.**

Second, some employers adjust the retirement income of employees during retirement in order to offset the effects of inflation. This protection is important, since life expectancy for retirees has been lengthening and early retirement (before age 65**) is increasingly common.**

6/5/3 Variable Life Policy:

Proposals to offer life insurance protection that varies according to inflation are relatively new. These proposals appear to be taking two general forms:

1- policies that specify that protection level change according to some cost-of-living index.

2- policies that specify that protection level vary according to changes in some designated stock market index. A few insurers have offered the later policies in the United States only since 1972.

Policies using the first method, the cost of living index, may be further subdivided into two categories, according to who bears the inflation risk. In the first category are arrangement in which the inflation risk is assumed by the policyholder and paid under one of several methods. For example, the insurer may offer the policyholder the right to purchase additional one-year term insurance as the cost-of-living index rises. The additional coverage is usually offered without medical examination and without heavy first-year acquisition costs. The rider permitting the additional coverage usually expires after 15 years or age 64, whichever comes earlier**. The premiums to be charged and the maximum amounts of coverage that may be purchased are specified in the contract.**

Policies in the second category are issued under contracts in which the insurer, not the insured, assumes the inflation risk. An example of these policies is that issued by the Life Insurance Company of Georgia, which has been offering such contracts since 1968 in 11 states. The policy has a level premium, but contains benefits, which escalate according to a cost-of-living index specified in the policy.

Cash values are set relatively high and the premium is also relatively high when compared to fixed-pound policies. For example, ate age 25 the gross annual premium on the whole life plan is about 50 percent higher than the regular (non-escalating**) basis.**

Variable life policies using the stock market index may also be classified under two headings:

-Those with a premium changing periodically according to the stock market index,

- Those with a fixed premium. The first plan has been in operation in The Netherlands for a number of years and is known as the Dutch design.

A well-known example of the second plan was first outlined in 1969 and is known as the New York Life design.

The Dutch design operates as follows: The whole reserve of the policy is held in a separate account the assets of which are invested primarily in equities**. The face amount varies according to the changes in the value of these equities, interest rate is assumed for the calculation of some premiums and reserves. If the value of the account in which the insurer's funds are invested doubles, the face amount and the premium double. Premiums and benefits are expressed in terms of units instead of pounds. The insured pays a premium of so many units, the number of which are fixed during the life of the policy; but the value of the unit's changes in a manner similar to the way in which the unit value of a mutual fund varies.**

The same actuarial principles that govern the calculation of reserves of regular fixed-pound benefit life insurance policies apply to the variable life policy of the Dutch design.

In the New York Life design the reserve of the policy is held in a separate account, in the same manner as that of the Dutch design. The assets are invested in equities, and the face amount of the life insurance protection varies with the value of these equities, but not in direct proportion.

Furthermore, it is expected that there will be a minimum death benefit guarantee of an amount not less than the initial face amount of the policy.

The cash and non-forfeiture values fluctuate in accordance with the changes in the equity account, but the premiums in pounds remains fixed. In the New York Life design the reserves per $1,000 of face amount are identical to the reserves per $1,000 face amount of fixed-dollar benefit life insurance policy.

Unfortunately, variable life insurance based on stock market values offers no guarantee that the face value or the savings element will actually offset inflation, since the stock market and the consumer price index do not correspond one-to-one by any means, particularly in the short run.

However, variable life insurance is an imaginative approach to the problem for which new solutions are badly needed.

6/5/4 The Variable Annuity:

An ingenious scheme giving inflation protection for the retiree and one that is in actual use among many United States life insurers is the variable annuity.

The objectives of the variable annuity are to offer a method by which the long-term saver may accumulate retirement funds in equities-securities the value of which are thought to follow the fluctuations in the general price level.

The basic idea is that, if the general price level rises over the accumulation period, the value of savings will also rise. Thus maintaining their purchasing power at a fairly constant level, if the general price level falls, the value of the savings will also fall; but their purchasing power will still remain fairly constant. In other words, the variable annuity attempts income that would have a varying dollar value but reasonably constant purchasing power. The regular annuities provide an income with a fixed-dollar value but a varying purchasing power. It is presumed that it is more desirable for the retired person to have an income with a value that in real terms is fairly constant than to have an income with a fixed amount but a fluctuating real value.

Although the purchaser of a variable annuity accepts the risk that personal savings and income may decline if the stock market falls, the insurer accepts the mortality risk. The insurer guarantees some minimum rate at which the annuity will be paid, and the annuitant cannot outlive this income. Thus the variable annuitant is assured a lifetime income which should be high enough to offset inflation and to maintain a standard of living at the level of the time of retirement.

6/6
Key Points

- Life insurance is often sold as a long term savings plan to build an estate.

- Problems of long-term savings includes proving regular savings, investing these savings in such a manner as to achieve reasonable safety. Investing savings to achieve reasonable liquidity. Making investments so as to achieve as large a consistent with safety and liquidity, developing sound plans for use of the savings desired objectives such as making provisions for dependents and for one's old age, securing protection against inflation.

- The probability of loss policyholders from life insurance company failures is so close to zero

- The liquidity of life insurance investment is guaranteed by contract.

- The interest return on the life insurance investment is conservative.

- Life insurance generally provides no inflation protection when all obligations and benefits are expressed in a fixed amount of pounds.

- There are several methods currently in use in the United States to help the long-run saver offset inflation.

- Inflation protection under employer sponsored pension and annuity plans is achieved in two major ways:

First: Many planes have benefit formulas based on covered wages and length of service.

Second: Some employers adjust the retirement in order to offset the effects of inflation

- Proposals to offer life insurance protection that varies according to inflation appear to be taking two general forms:

- Policies that specify those protection levels change according to some cost-of-living index.

- Policies that specify that protection level vary according to changes in some designated stock market index.

- Variable life insurance based on stock market values offers no guarantee that the face value or the saving element will actually offset inflation.

- The objectives of the variable annuity are to offer a method by which the long term saver may accumulate retirement funds in equities securities the value of which are thought to follow the fluctuations in the general price level.

6/7
Reinsurance

6/7/1 Necessity of Reinsurance:

Where the amount on any one risk or risks which form one hazard is such that it is beyond the limits which it is reasonable for one insurer to carry, it is necessary to effect reinsurance.

Large risks are encountered in all sections of insurance business. For this reason reinsurance is required in all departments with the object of providing a greater spread of risk, so that a heavy claim, while made upon the one insurer who issued the policy**, is in fact borne by a number of insurers.**

The general principles of reinsurance are common to all sections of insurance, **subject, of course, to modifications in their adaptation to individual classes of business**.

It is essential that the utmost good faith is observed at all time between the direct insurer and the re-insurer.

Insurable interest is also vital in all contracts of reinsurance, and it has been held that the issue of a policy with acceptance of liability thereunder by the direct insurer is sufficient to constitute such insurable interest.

At the same time, the original insured acquires no rights under a reinsurance contract, which operates solely between the direct insurer and the re-insurer.

If the direct insurer should become insolvent, recoveries under reinsurance form part of the general assets available for distribution among all creditors.

If a re-insurer fails to meet his obligations, the direct insurer is still liable in full to the insured.

All contracts of reinsurance are contracts of indemnity only, whether or not the policy issued by the direct insurer (e.g., personal accident insurance**) is one of strict indemnity. This is because the re-insurer undertakes to indemnify the direct insurer in respect of a proportion (**and occasionally the whole**) of the amount of liability incurred to the policyholder.**

6/7/2 Reinsurance Terms:

The following are definitions of terms generally used in reinsurance:

a) Direct Insurer:

The insurer, who accepts the risk from the insured and who, so far as the policyholder is

concerned, is alone responsible for the obligation undertaken.

b) Re-insurer:

The insurer who grants a guarantee (accepts a reinsurance**) from the direct insurer**.

c) Ceding insurer:

The insurer who obtains a guarantee (or places a reinsurance**).**

d) Cession:

The amount given off by way of reinsurance and therefore the amount accepted by the re-insurer.

e) Reinsurance policy:

The contract of reinsurance excepts in fire practice where it is termed a guarantee, or guarantee policy.

f) Retention or holding:

That portion of the risk, that the direct insurer holds on his own account.

g) Line:

The amount of the retention of the direct insurer; a re-insurer may accept one or more lines (or a fraction of a line**).**

h) Retrocession:

A reinsurance of reinsurance, i.e. where the re-insurer desires to reduce the limit of his liability in respect of business accepted.

i) Reinsurance commission:

The amount paid by the re-insurer to the ceding company as a contribution to the acquisition and administration costs. It is calculated on a percentage of the premium received by the re-insurer.

j) Profit commission:

A percentage of the earned profits which the re-insurer agrees to return because the profit earned on business passing under a reinsurance treaty is deemed to be due to skill and care in the conduct of the business by the direct insurer.

6/7/3 Reinsurance Methods:

There are three main methods by which reinsurance may be affected, and the extent to which these methods are used respectively must, of course, depend upon the practice of insurers and the scope of their resources. These three methods are:

A) Facultative;
B) Treaties;
C) Pools.

A) Facultative:

This is the oldest method of reinsurance and it necessitates the consideration of each risk separately. Its drawback is the amount of work involved and the time taken to place a risk because, after the direct insurer has decided upon his own retention, it is necessary to submit the details of the risk, with the amount available for reinsurance, to one or more other offices.

There is uncertainty that each office to which the offer is made will accept the business, while the amount of the acceptance is entirely within the discretion of each re-insurer.

The procedure is to submit a slip to each re-insurer giving details of the risk, with the rate(s), and the amount of the ceding company's retention. The re-insurer then initials the slip with the amount of his acceptance, and this process must be repeated until the whole of the risk has been placed. Cover is not usually granted to the insured until the reinsurance have been fixed.

The next step is to issue a request note, which contains formal particulars of the risk, and the re-insurer then issues a take note. The take note is often stamped in order to avoid the necessity of the further issue of a formal guarantee policy**.**

Renewals have to be dealt with individually by the issue of renewal statements on the part of the re-insurers, followed by advice by the direct insurers of renewals, lapses, and cancellations, and later settlement in account.

There is usually a time lag of three months, more particularly where the direct business is through a credit agent who has a quarterly account. If any re-insurer does not wish to continue on a risk after next renewal date, due notice must be given, and the direct insurers then try to find another re-insurer to accommodate them.

B) Treaties:

Under this method of reinsurance, an agreement is entered into between the direct insurer and the re-insurer (either one company or several)**, whereby the ceding company agrees to cede and the re-insurer agrees to accept all insurance offered within the limits of the treaty. This means that automatic protection is secured and that it is obligatory for the re-insurer to accept all risks within the scope of the treaty.**

The direct insurer, therefore, can grant cover immediately for any proposal accepted within the limits of the treaty.

Methods of reinsurance treaties:

1- Quota share treaty:

Under this type of treaty, a fixed proportion of a given class of insurance as a whole is ceded. If, for example, reinsurance is arranged on a 50 percent basis, the re-insurer accepts half of each risk, obtains half the premiums (less commission**), and bears half the claims, while the ceding company retains the balance of 50 percent. Commission is, of course, a matter of mutual arrangement. This type of reinsurance has the advantage of simplicity but its disadvantage is the necessity of paying away premiums on small risks instead of retaining the whole for the direct insurer's own account. There is no risk of selection against the re-insurer, all business coming to the treaty.**

2- Surplus treaty:

The direct insurer merely places on the treaty any part of the risk, i.e., the surplus, which it is not desired to retain. It follows that if a certain risk is wholly retained, there is no surplus to place on the treaty. If a treaty is arranged so that three, four, or more lines are secured in this way (a line being the amount of the direct insurer's retention**). The latter can thus accept automatically a risk which is four or more times the size of his own holding, but for any larger risk the balance must be reinsured facultative.**

3- Excess of loss treaty:

An insurer decides the maximum amount he is prepared to bear on any one loss and seeks reinsurance under a treaty whereby the re-insurers will be responsible for the amount of any losses and above the amount retained by the direct insurer. There may be an upper limit to the treaty so that if the insurer, for instance, is content to bear the first L.E. 3000 of any loss, the treaty re-insurers will bear any loss over first L.E. 3000, but not exceeding, say, L.E. 100000. For cover beyond that limit, a further excess of loss treaty may be negotiated, or the direct insurer may be content to bear the possibility of a claim exceeding L.E. 100000.

4- Stop loss treaty:

This is a modern variation of excess of loss whereby the loss ratio of the ceding insurer is stopped at an agreed percentage, and if the loss ratio in any year exceeds the percentage the re-insurers bear the difference. Stop loss reinsurance can be arranged in addition to a surplus treaty.

Of the foregoing methods of reinsurance, (1) and (2) are proportionate in that the premiums are shared and the loss are paid by the insurers and the re-insurers in proportions agreed before the loss. Methods (3) and (4) are known as non-proportionate in that the premiums are not

necessarily divided between the insurer and the re-insurer in the same proportion as they pay claims. They are more commonly used for motor and general third party risks.

In (1) and (2) above, details of risks placed on the treaty and of subsequent alterations may be advised to the reinsurer periodically, but this has never been universal.

The need to reduce administrative costs has resulted in this practice becoming less common, but the re-insurers are supplied (usually quarterly**) with a statement of premiums and losses and have the right to inspect the appropriate reinsurance records of the insurers.**

The re-insurers do not require to be advised of risks accepted under (3) and (4), but are advised of all claims likely to involve them in a payment under the treaty.

C) Pooling Schemes:

These schemes are adopted mainly for catastrophe risks, that is, where the happening of the insured event may involve unusually heavy loss, damage, or liability (e.g., where a large number of persons may be injured**), so that the total claims upon the insurers will be considerable.**

All claims (and all losses**) may be pooled, or the surplus above a fixed retention, or an agreed**

excess of loss, may be dealt with in this way. Each member, in effect, receives back a share of his own cessions and a like share of the cessions of others, so that each is liable for only a comparatively small share of a wide spread of business.